

DISCOVERING HYPERTEXT  
WITH  
JOYCE, FAULKNER, AND BORGES

By  
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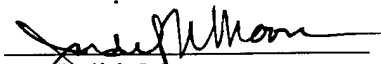
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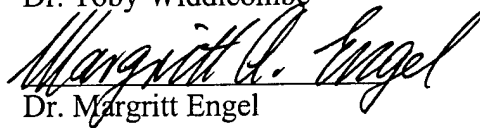
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## Abstract

Few technological advances have impacted the way we live our lives as has the Internet. This breakthrough is considered to be a brainchild of a relatively small group of young, gifted electronics hobbyists in the mid- to late-70's. I argue, however, that this group was not constructing a new paradigm out of nothing; rather, they were expanding upon a way of thinking that leading writers of fiction in the first half of the 20<sup>th</sup> century had already articulated. I will show how many of the techniques, subjects, and themes of James Joyce, William Faulkner, and Jorge Luis Borges—stream-of-consciousness, memory, multiple universes—anticipate recent technological developments and in the process form an intertextual dialogue with contemporary hypertext.

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## Preface

This thesis repeatedly raises the question of cause and effect. Did the works of Joyce, Faulkner, and Borges directly contribute to our contemporary paradigm of the World Wide Web? Did the technological pioneers of the 20<sup>th</sup> century read and study modernist literature, and if they did, how did it affect them? Admittedly, I cannot demonstrate that the texts studied here have a direct causality as far as hypertext and the Internet are concerned. However, causality cannot be disproved, either (“For want of a nail. . . a kingdom was lost”). By virtue of these texts having entered the world, it is not possible to know what would have otherwise happened in the world. There is no way of proving, historically, what events “cause” other events, and which simply make them more likely. Neither is there a way of saying what the outcome would have been had certain events never happened.

Marshall McLuhan observed that “what we ordinarily see in any present is really what appears in the rearview mirror. What we ordinarily think of as present is really past.” By establishing a connection between these disparate fields (literature and technology), I, too, hope to create a sense of continuity between the past and the present

## Introduction

Truth is not matching. It is neither a label nor a mental reflection. It is something we make in the encounter with the world that is making us. We make sense not in cognition, but in replay. That is my definition of intellection, if not, indeed, scholarship. Representation, not replica.

- Marshall McLuhan, *The Global Village*

This project was born of a number of different factors, all of which compete for preeminence in my mind and time: a love of literature, a marvel at the technology and dynamics at work behind the Internet, and an appreciation for the lucid, prophetic writings of Marshall McLuhan. Of these different pursuits, the first two exhibit the strongest influences. In their own way, each affects how I perceive the other. As is invariably the case with all students of literature, reading for me, too, is more than just a hobby; it is also a means of sustenance. It is a means through which new vistas are opened. The book becomes a portal through which I can be exposed to new worlds, meet new people, and enjoy new experiences. This idea of territorial expansion through a text is of course not new, nor has it always been embraced. Indeed the voyeurism and vicariousness that are often made possible by the reading experience are the very things that long kept the novel mired in the lower strata of the arts.

The territorial expansion that many experience in the act of reading is also experienced by many people in the wake of our current technological revolution. Indeed

the revolution in which we currently find ourselves is markedly changing the ways in which we live our lives. The pressure of this change is inescapable. Leading the charge in this transformation is the Internet. The Internet is many things to many people: a time killer, a business tool, a source of information, a forum for virtual conversation, a meeting place for virtual communities. To me, I suppose the Internet is all of these things. Whatever mode it is operating in, however, one thing is certain: I cannot help but view the “real” world in which I live differently as a consequence of the Internet. The hypertextual web page, with its numerous links, attempts to approximate the human mind. One can store and retrieve information by referential links for quick and intuitive access. An example of how I arrived at this conclusion will help illustrate my point.

My 8 year-old son was surfing the net, whereupon I told him I had to use the computer. “Can I come back to this page when you’re done, dad?” he asked before relinquishing the chair. “Yes, bud,” was my response. “And yes,” I added, anticipating his next question, “I’ll make sure I get you back to this page when I’m done.”

After some time, I realized it was time to make good on my promise to my son. Before turning over the “controls,” I also thought to make good on my promise of returning him to the page from which I had launched my hypertextual journey. I clicked on the pull-down menu next to the uniform resource locator field, but saw none of my son’s sites. So I simply started clicking the browser’s back button. The web sites, now safely cached in a temporary file on my hard drive, peeled off in quick succession. Stock quotes, a sports page, an on-line bookseller, a book review, a weather report, an on-line



magazine, another sports page, another weather report, an automobile product warning, an on-line auction. The list went on. Initially I was simply bothered by the exercise, and sorry that I had not taken the simple measure of bookmarking the web site my son had been at originally. As I continued on, however, I realized that what I was looking at was an electronic archive, of sorts, of my thought process. Certainly something had prompted me to visit each of those sites in the first place, a stimulus I may or may not have registered consciously. It was in this rather banal experience that I realized what I was trying to convey in the course of my thesis--namely, that within the texts of Joyce, Faulkner, and Borges exists a prefiguring of hypertext mark-up language, or HTML, the program language of the Internet.

I am not the first to come to this conclusion. Michael Joyce, a literature professor at Vassar College and a hypertextual author himself, suggests that hypertextual and mixed media qualities of James Joyce's *Ulysses* are in many ways prime examples of what makes a hypertext. "The work as it stands—" he says, "the linguistic, the temporal, the syntactic, the semiotic elements—were [*sic*] the warp upon which [James] Joyce wove what was understandably the original hypertext" (qtd. in Lillington 3). The "Circe" episode of *Ulysses*, in particular, provides ample proof of Joyce's comprehension of the polyvocality of the world. Both the protagonist Bloom and, to a lesser extent, his reluctant protege Stephen Dedalus, have experiences akin to modern-day web surfing. Thoughts simply pop into the two characters' minds, often without any warning. From these thoughts are spun elaborate fantasies. The fantasies are reeled off in rapid,

kaleidoscopic succession, with words or groups of words either from within the characters' minds or without prompting yet another fantasy. Michael Joyce suggests that "Joyce would have welcomed the ability to play language upon language, not only to evoke it but to literally represent it, to allow language to drift and fragment" (qtd. in Lillington 3). These suggestions are based on conjecture, of course. However, given what James Joyce said about language, and how he depicted it in his work, Michael Joyce's argument has merit. Rob Callahan, editor of *The Brazen Head*, an on-line resource for Joyce information, also sees Joyce as being pertinent to a technological discussion. "Hypertext is simply the technological means by which we have come to inscribe and read texts such as Joyce's," he says. "Like hypertext, Joyce's great works eschew linear progression, are densely allusive and intricately self-referential, and invite readers to wander, to play, to explore" (qtd. in Lillington 4).

Faulkner's *The Sound and the Fury* likewise attempts to recreate the thought processes at work in the minds of several characters. One of the main characters in that novel is an idiot who, in the author's words, has no concept of time. Thus, the reader is left to his own devices in trying to navigate the warp speed at which the narrator's mind is travelling. Like Joyce's Bloom, Faulkner's idiot, Benjy, has thoughts which spontaneously erupt in his mind, which are recounted without any regard to chronological linearity. Benjy's two brothers, meanwhile, who each provide accounts of their story in subsequent sections of the book, are both of "sound mind," at least by conventional clinical standards. However, as their sections progress and thought fragments break off,

it becomes clear that their minds are also compromised by their conceptions of time. It is not until the fourth and final section of the book that the reader arrives at the “site map.” This section places the family within a social context. The reader is thus able to get a bird’s-eye view of the dynamics at work in this troubled Southern family. Of course, as is the case with site maps at a web site, “meaning” is not the reward for reading the fourth and final section. The fourth section is instead only a means of temporary orientation. Meanings, such as they are, are found only within the (hyper)text. The satisfaction that formal closure would seem to promise is denied, as the reader is referred back to the text for further exploration.

Faulkner’s *As I Lay Dying*, also examined in the third chapter, takes the concept of the atomization of the novel to a new level. This is not to say that the reading experience it encourages is less rewarding than that of *The Sound and the Fury*. It is, however (true to modernist form), something new; and the extreme bending of time that takes place in the earlier text gives way to a more deliberate, more polyphonic text. In this self-described “tour de force,” Faulkner gives a number of different characters opportunities to tell their stories (59 opportunities in all). *As I Lay Dying* is like a virtual message board, with each member competing for the reader’s sympathy and loyalty. While formal closure seems closer at hand than in the previous text, it too is ultimately denied. The reader can only throw his hands up at the conclusion, and, as with *The Sound and the Fury*, explore the links once again for meaning.

Borges, meanwhile, anticipates the shortening attention span that many consider

the plague of an information society, and packages his provocative messages in the short story. His various tinkering with time expands the reader's self-uncertainties, making him less secure perhaps, but more aware of entire realms of ignorance and of the reader's desire to pose a reality for security's sake. As Ana Maria Barrenechea notes, Borges

permits himself all types of interplay—going upstream against temporal flow, exhausting the combinations of the past, present, and future; rotating on the interminable wheel of cyclical time; diverting the same cyclical time, as well as subdividing it infinitely; detaining and negating it, trying different hypotheses of eternity. (104)

Two of Borges' stories which are illustrative of this interplay of past, present, and future time will be examined here: "The Garden of Forking Paths" and "Funes the Memorious" (both come from his collection of short stories and essays, *Labyrinths*). The former is in many ways a metaphor for the Internet. In this story is articulated Borges' fascinating, if not fantastic, theory of multiple universes, in which everything that happens to a man happens "precisely, precisely now" (Borges 12). Time, as it were, is played in an omnipresent tense. In this story, the protagonist articulates a Borgesian temporality which precludes identical readings of any given text. The text remains not so much a static identity of experience but rather an offshoot of itself, branching into simultaneous resemblance, remembrance, and reaction. Whether readers modify a text by genius, by chance, or by neglect, an ongoing, ever-changing invention exists. One person's work informs another, and categorizing time melts into an ambivalence and multiplicity of

texts and authors.

In “Funes,” meanwhile, Borges again projects both forward and backward, in this case providing subtle commentary on Joyce’s Bloom while anticipating the information overload that many decry as the plague of the 21st century. Its title character is, like many of the characters in the other texts I will examine in this thesis, a quasi-savant. As a result of being kicked by a horse, Funes is made a paraplegic. With this accident comes a photographic memory. Unlike others who’ve been “blessed” with this talent, however, Funes not only does not, but cannot forget anything. Funes is a “sensory man” who is ultimately crushed under the weight of superfluous, irrelevant information. “Funes,” I suggest, provides a subtle warning to those overly enamored with the abundance of information made available in this electronic age.

The temporal heterogeneity which is so evident in the texts I intend to examine finds its theoretical complement in the work of Mikhail Bakhtin. Critics have been slow to appreciate this aspect of Bakhtin’s work: “chronotope,” the key term in his discussion of time and narrative, has remained a hazy item in the critical vocabulary. If we develop the theory of temporality suggested in the idea of the chronotope, however, and examine its relation to Bakhtin’s theories about discourse, we can discover new, rich concepts for exploring time and narrative. Bakhtin opens ways to discuss how assumptions about time condition narrative forms, how narratives reconstruct experience, how characters’ temporality shapes their perceptions, how multiple senses of time can be at play in a single text, and how the process of reading reshapes texts. By working out crucial

connections between time, perception, and language, he suggests that questions about time are fundamental for studies of both texts and experience. For Bakhtin, literary genres are not only aesthetic forms, but also “profound forms of thinking” about human experience (Morson, “Bakhtin, Genres” 1077). Together, his chronotope and discourse theories propose ways to understand heterogeneous experiences of temporality and their re-creation in narrative.

Bakhtin develops his ideas on time in the book-length essay “Forms of Time and of the Chronotope in the Novel: Notes Toward a Historical Poetics,” written in 1937-1938 and amended significantly in 1973 with the addition of a section titled “Concluding Remarks.” Conceptions of time and space, or chronotopes, Bakhtin emphasizes, are “constitutive” for literature: they not only define “genre and generic distinctions,” but also determine “to a significant degree the image of a man in literature as well” (85). Time, traditionally thought to be a wholly different entity than the spatial dimensions, begins to take on spatial-like qualities; it “thickens. . . and takes on flesh, becomes artistically visible” (84). It is given substance, to such a degree that time, ever flowing and fleeting, slows down, and space, in which exist the objects which traditionally serve as markers for the passage of time, lends itself to closer examination: “It becomes charged and responsive to the movements of time, plot and history. This intersection of axes and fusion,” he concludes, “characterizes the artistic chronotope” (84). The novel makes the experience of “real historical time” perceivable through the chronotopes embodied in its characters, forms, and languages; as new senses of the relation of time

and space prevail historically, new forms arise to replace those that have--literally-- become anachronistic. With this model of literary history, Bakhtin writes a “historical poetics” that accounts for the “generic heterogeneity” of European fiction from Greek romance to the nineteenth century in terms of a developing series of “novelistic chronotopes” (85)

In the “Concluding Remarks,” Bakhtin finally addresses the question that underlies the entire essay: “What is the significance of all these chronotopes?” Chronotopes, he emphasizes, do not merely characterize representation, but actually make it possible: “The chronotope is the place where the knots of narrative are tied and untied” (250). Experience can only be represented chronotopically:

It is precisely the chronotope that provides the ground essential for the showing-forth, the representability of events. All the novel’s abstract elements--philosophical and social generalizations, ideas, analyses of cause and effect--gravitate toward the chronotope and through it take on flesh and blood, permitting the imagining power of art to do its work.

Such is the representational significance of the chronotope. (250)

Our understanding of time (and space) shapes even our language: “every entry into the sphere of meanings is accomplished only through the gates of the chronotope” (258). Every text is grounded not only in social and historical contexts, but equally in temporal/spatial conceptions. As Michael Holquist proposes,

what is often overlooked is that there is not only a “political unconscious,”

but what might be called a “chronotopic unconscious,” a set of unspoken assumptions about the coordinates of our experience so fundamental that they lie even deeper (and therefore may ultimately be more determining) than the prejudices imposed by ideology. In fact, the two may be coterminous. The deepest levels of our assumptive world are probably those where we unreflectingly conceive the nature of time and space. . . . Beliefs about the nature of time/space itself arguably condition the very language people speak. (141-42)<sup>1</sup>

In the literary history Bakhtin proposes in the original essay, multiple chronotopes exist in any particular present merely as reified forms from the past (85). Evident in his examples, however, is the idea of multiple, interrelated senses of time, not merely in the same historical era, but also with respect to the same text: often, it is the struggle or dialogue between them that animates the narrative. In classical Greek biography, he explains, it is the relation between the internal chronotope of the work and the external chronotope of the world receiving it that matters; in Dante, the “extraordinary tension” between an “extratemporal” literary chronotope and a “living historical” one (131, 158). Bakhtin is especially interested in why different narrative chronotopes become inadequate, and how new ones develop as social and cultural circumstances change. Indeed, Morson and Emerson suggest that his interest in early, pre-modern novelistic chronotopes lies partly in their striking difference from those of modern life, as embodied in the nineteenth-century novel (373).



In the “Concluding Remarks,” Bakhtin amplifies these early hints about multiple chronotopes and proposes the outlines of a more complex theory of narrative temporality. Here he describes the world as fundamentally multitemporal. Within any narrative, he explains in a crucial passage, several chronotopes may be at work:

Chronotopes are mutually inclusive, they co-exist, they may be interwoven with, replace or oppose one another, contradict one another or find themselves in ever more complex interrelationships. The general characteristic of these interactions is that they are dialogical (in the broadest use of the word). . . (this dialogue) enters the world of the author, of the performer, and the world of the listeners and readers. And all these worlds are chronotopic as well. (252)

Despite the importance of the dialogical in his work, however, Bakhtin does not develop this provocative idea of a “dialogue of chronotopes” explicitly. He discusses it only generally, in terms of a continual “renewing” of the literary text “through the creative perception of its listeners and readers” (254). Bakhtin’s well-elaborated theories of dialogue, however, enable us to develop the significant but unexplored implications of his chronotope theory. For in effect, as Morson and Emerson note, Bakhtin’s “discourse and chronotope theories of the novel are two aspects of the same theory” (Morson 372).

Two of the multiple chronotopes that Bakhtin contends may be at work in a narrative are important to this study. The first of these is the chronotope of the road. “Encounters in a novel,” Bakhtin observes,

usually take place “on the road.” The road is a particularly good place for random encounters. On the road (“the high road”), the spatial and temporal paths of the most varied people--representatives of all social classes, estates, religions, nationalities, ages--intersect at one spatial and temporal point. People who are normally kept separate by social and spatial distance can accidentally meet; any contrast may crop up, the most various fates may collide and interweave with one another. On the road the spatial and temporal series defining human fates and lives combine with one another in distinctive ways, even as they become more complex and more concrete by the collapse of social distances. The chronotope of the road is both a point of new departures and a place for events to find their denouement. Time, as it were, fuses together with space and flows in it (forming the road). (243-244)

Indeed each of the texts I will be examining features a chronotope of the road: Bloom and Stephen spend the greater part of *Ulysses* wandering the highways and byways of Dublin; in *The Sound and the Fury*, much of Quentin’s section is “recounted” from the road, while Jason spends most of his time on the road in a vain effort to chase down his niece; in *As I Lay Dying*, the Bundren family take to the road in their quest to have the family matriarch buried. Borges’ Yu Tsun takes flight in “The Garden of Forking Paths” in order to escape his nemesis; and the first person narrator of “Funes” meets the title character in a chance encounter while horseback riding with his cousin.

Another chronotope that is of relevance to this study is the chronotope of the threshold. The chronotope of the threshold, according to Bakhtin,

is connected with the breaking point of a life, the moment of crisis, the decision that changes a life (or the indecisiveness that fails to change a life, the fear to step over the threshold). The threshold and related chronotopes--those of the staircase, the front hall and corridor, as well as the chronotopes of the street and square that extend those spaces into the open air--are the main places of action. . . , places where crisis events occur, the falls, resurrections, renewals, epiphanies, decisions that determine the whole life of a man. In this chronotope, time is essentially instantaneous; it is as if it has no duration and falls out of the normal course of biographical time. (248)

The brothel in "Circe," the church in *The Sound and the Fury*, the Bundren home, Albert's garden, Funes' bedroom, are all examples, I would suggest, of the motif of the threshold.

What is also notable about the motifs of the road and the threshold is that they aptly convey aspects of the World Wide Web, the "information superhighway," which is accessed through the portal (threshold) of a search engine. This contention in itself is exemplary of the dialogism Bakhtin contends is ubiquitous. "We may call this world the world that creates text," Bakhtin states, to which he adds, "Out of the actual chronotopes of our world (which serves as the source for representation) emerge the reflected and

created chronotopes of the world represented in the work (in the text)" (253). For there to be a truly viable dialogism, however, we must also concede that this world is, at least in some respect, created by the text as well. It is this idea of exchange and dialogue between what we call "reality" and text that is behind the adage "life imitates art." In Bakhtinian terms, of course, what is being done is not imitation, necessarily. Rather, it is a matter of life appropriating that which is presented in art (text) and re-presenting it in the world.

Bakhtin himself is careful to draw distinctions (such as they are) between fiction and reality. "We must never forget [this boundary line], we must never confuse--as has been done up until now and as is still often done--the represented world with the world outside the text (naive realism)" (253). Despite this distinction, however, one is forced to concede that fiction (text) and "reality" (world) are in dialogic relation to one another. I suggest that the forces at work in the texts I will examine become applied to the world in which the text is transmitted, to the same degree that forces in the world are applied to the text. These forces, I suggest, inform our contemporary understanding of hypertext.

In light of Bakhtin, then, the interrelation of multiple voices characteristic of narrative, particularly of the modern novel, may be understood in significant ways as a dialogue of chronotopes. A conventional stream of consciousness reading argues that showing characters from within as they assimilate language and experience reveals what it truly means to exist in time; it relies on the assumption that an "inner" perspective is more real than an "outer" one. A Bakhtinian reading takes critical theory crucial steps

deeper: part of what fiction reveals is the genesis, use, and revision not only of language, but also of the many temporal concepts that human beings use to shape both experience and world and make them meaningful. These chronotopes take shape and are highlighted in the continual interaction between a character and his or her world, between differing languages, and between author, narrator, characters, and readers. For Bakhtin, narrative offers the richest ground for exploring the nature of both the chronotopic unconscious and the human experience of temporality.

While Bakhtin is the critical lens through which I view the temporal heterogeneity of my subject texts, Marshall McLuhan is the lens through which I view the technology that I contend is one of the byproducts of these texts. Electronic media has not only changed our world view by speeding up information's dissemination and retrieval, but its binary and immaterial nature constitutes a silent revolution. The slogan "the medium is the message" became the central and most popular theme of McLuhan's analysis. By examining everything from sixteenth-century literature to twentieth-century business practices McLuhan sought to expose the effect of the forces hidden deep within telecommunication and digital technologies. From his point of view technology is an extension of our senses; so in his representation of electric man, the dynamic of electronic media is neither neutral nor mechanical but neural. Throughout, he emphasizes that electronic media collapse time and space, creating a here and now in which the ear becomes the eye's equal, and the audile-tactile empire of our senses is reinvigorated.

Such a postulation made McLuhan a high-profile figure of the very media networks he so carefully analyzed. His message, however, burned hot and fast. As Michael A. Moos notes, “Just when McLuhan predicted packages would be obsolete, he himself was being packaged in a manner which ensured that the implications of what he was saying would be deflected, diffused, and deferred, filed with playful bewilderment alongside the unfathomable contributions of other ‘geniuses.’” (140) As Lewis Lapham noted several years ago in his introduction to *Understanding Media*, however, “Much of what McLuhan had to say makes a good deal more sense in 1994 than it did in 1964” (xi). Additionally, in the 21<sup>st</sup> century, a time when technology looms larger than ever before, McLuhan’s writings seem even more germane to a discussion that involves hypertext.

“All media are a reconstruction, a model of some biologic capability speeded up beyond the human ability to perform,” McLuhan suggested in *The Global Village*:

the wheel is an extension of the foot, the book is an extension of the eye, clothing an extension of the skin, and electronic circuitry is an extension of the central nervous system. Each medium is brought to the pinnacle of vortical strength, with the power to mesmerize us. When media act together they can so change our consciousness as to create whole new universes of psychic meaning. (86-87)

While McLuhan did not live to see hypertext technology as manifested in the Internet, I would suggest that he could agree with the contention that I (and others) make, that the

Internet is an extension of the human mind. Additionally, I would invoke McLuhan when I argue the point that the extension of the human mind that is the Internet was explored to new depths and in profound ways long before the World Wide Web, by the likes of Joyce, Faulkner, and Borges. "I believe that artists, in all media, respond soonest to the challenge of new pressures. I would like to suggest that they also show us ways of living with new technology without destroying earlier forms and achievements" (125). McLuhan's exhortation is to artists of the future. My point is to demonstrate that artists of the past have already heeded his challenge.

Webmaster Joyce

- It is as painful to be awakened from a vision as to be born.
- Bosh! said Stephen rudely. A man of genius makes no mistakes. His errors are volitional and are the portals to discovery (*Ulysses* 9.228-29)

Blue halo of computer screen, the rasping electronic siren song of the modem, Web browser stately plump with the latest plug-ins *a dreariodreama setting, glowing and very vidual*. Nighttown eyes, the dregs of coffee, three a.m., just click on this one last link. . . *the proteiform graph*. 404--File Not Found. *Where are we at all? and whereabouts in the name of space?* O, shite and onions. (Lillington)

“Alexander so changed the world,” historian W.W. Tarn wrote, “[that] nothing after him could be seen as it was before” (4). Perhaps chaos theoreticians would dismiss such a statement as mere cliché, contending that every act executed in the world changes it forever (thus refuting the Newtonian principle of every action having an equal and opposite reaction).<sup>2</sup> In a comment to his brother Stanislaus, James Joyce conveyed a thought that certainly seems sympathetic with chaos theory:

Do you see that man who has just skipped out of the way of the tram?

Consider, if he had been run over, how significant every act of his would



at once become. I don't mean for the police inspector. I mean for anybody who knew him. And his thoughts, for anybody that could know them. It is my idea of the significance of trivial things that I want to give the two or three unfortunate wretches who may eventually read me. (qtd. in Ellmann 163)

Likewise, Joyce's Stephen Dedalus implies his appreciation of chaos theory in the "Aeolus" episode of *Ulysses*, with his remarks about the ordinary act of lighting a cigar: "I have often thought since on looking back over that strange time that it was that small act, trivial in itself, that striking of that match, that determined the whole aftercourse of both our lives" (7:763-765).

Despite the evidence in both the artist and in one of his protagonists of an appreciation for elements of what would become chaos theory, however, I think it would nonetheless be disingenuous to deny the significance some figures play in shaping and reshaping the world, for both their contemporaries and for future generations. Clearly, James Joyce is a figure who exhibits an Alexander-like influence. Like the great Greek general, Joyce dramatically modified the world in which he lived, the world of letters, in such a way as to change the reading experience for students of literature while forcing artists to re-examine what it is they want to convey in their work. T.S. Eliot expressed this idea when he wrote to Virginia Woolf after reading *Ulysses* (ironically, just a few months before the publication of the poem that was to become Eliot's defining literary effort—*The Waste Land*), "How can anyone write again after achieving the immense

prodigy of the last chapter?" (qtd. in Ellmann 528). The answer, of course, is that the artist can write again only after a thorough examination and catharsis of the soul.

Moreover, I would suggest Joyce's art transcends the world of literature. *Ulysses* has become a template for a new kind of thinking, applicable to all people, not just artists and students of literature.

One group which seemed especially sensitive to some of the messages Joyce was trying to articulate was the scientific and technological community of the early part of the century. My argument is that some of the techniques and themes explored by Joyce in *Ulysses*—stream of consciousness, interior monologue, non-linear narrative—anticipated, and probably contributed to and informed, our contemporary notion of hypertext, the program language which powers the Internet. In this chapter I will demonstrate the intertextual relationship that exists between the hypertextual world of the Internet and Joyce's epic narrative.

From my introductory paragraph it is perhaps obvious that I will be making frequent use of the terms "intertext" and "hypertext" throughout the course of this thesis. In the 20<sup>th</sup> century, both terms enjoyed an increasing amount of popularity and usefulness. However, with the proliferation of their respective uses, various meanings for the two terms have arisen as well. Consequently, it is appropriate that I begin with definitions for each term.

Intertextuality, or dialogism, as its founder, Mikhail Bakhtin, termed the theory, is the activity that exists between writers, readers, and texts. Bakhtin asserts that the novel

as a product of language is not a monologic entity, but is instead a combination of many different, indeed innumerable, established modes of writing. He speaks of a "system of languages that mutually and ideologically inter-animate each other" ("Epic" 47). The essence of his theory lies in the concept of a supposed dialogue between the novelist and earlier writers, not just between the texts themselves. Intertextuality then is the interanimation that takes place between writers, texts, and other texts. Simultaneously, he places the onus on the reader or group of readers to vivify the exchange (Durrey 616). Julia Kristeva expanded upon Bakhtinian dialogics in the late sixties. In essays such as "Word, Dialogue, and Novel," Kristeva broke with traditional notions of the author's "influences" and the text's "sources," positing that all signifying systems, from table settings to poems, are constituted by the manner in which they transform earlier signifying systems. The meaning of a literary work, then, is not simply the product of a single author, but of its relationship to other texts and to the structures of language itself. "[Any] text," she argued, "is constructed of a mosaic of quotations; any text is the absorption and transformation of another" (66). Michael Riffaterre, meanwhile, wrote that

intertextuality is generated by textuality; that is, it continues, beyond the text's limits, the production of those formal features that make for the text's unity and that substitute an overall significance for the successive meanings of the text's discrete components. It is a linguistic network connecting the existing text with other preexisting or future, potential texts. It guides reading. (786)

What is interesting about Riffaterre's definition is the equal emphasis he places on both textual predecessors and *followers*. The exchange for which Bakhtin is arguing, Riffaterre says, is not unidirectional; instead, it can move both backward and forward.

Intertextuality is thus a way of accounting for the role of literary and extra-literary materials without recourse to traditional notions of authorship. It subverts the concept of the text as self-sufficient totality, and instead foregrounds the fact that all literary production takes place in the presence of other texts; they are, in effect, palimpsests. For Roland Barthes, it is intertextuality that allows the text to come into being:

Any text is a new tissue of past citations. Bits of code, formulae, rhythmic models, fragments of social languages, etc., pass into the text and are redistributed within it, for there is always language before and around the text. Intertextuality, the condition of any text whatsoever, cannot, of course, be reduced to a problem of sources or influences; the intertext is a general field of anonymous formulae whose origin can scarcely ever be located; of unconscious or automatic quotations, given without quotation marks. (39)

For Barthes, writing is always an iteration which is also a re-iteration, a re-writing which foregrounds the trace of the various texts it both knowingly and unknowingly places and displaces. Moreover, intertexts need not be simply "literary"--historical and social determinants are themselves signifying practices which transform and inflect literary practices. Finally, a text is constituted, strictly speaking, only in the moment of its

reading. Thus the reader's own previous readings, experiences, and position within the cultural formation also form crucial intertexts. The concept of intertextuality dramatically blurs the outlines of the book, dispersing its image of totality into an unbounded, illimitable tissue of connections and associations, paraphrases and fragments, texts and contexts.

Before defining hypertext I should acknowledge that placing Joyce in a discussion involving 21<sup>st</sup>-century paradigms is obviously an act of revisionist literary history. That is to say, the word "hypertext" was coined after his death. However, my placing Joyce in a hypertextual discussion is more than simply putting a new spin on the past in the hopes of making a square peg fit a round hole. The literary history that places Joyce in a 21<sup>st</sup>-century context is still a work of literary criticism, whose ultimate goal is to illuminate the text. As David Perkins says in his book *Is Literary History Possible?* "Literary history seeks to explain how and why a work acquires its forms and themes, to help readers orient themselves" (178). Helping a reader orient himself is precisely my purpose here. In the latter half of the 20<sup>th</sup> century, literature students have been apprised of everything from the death of the author to the notion that a factual past is illusory. While claims such as these may contain some merit, and have certainly been argued dexterously by some, the sleight of hand with which they have often been executed has led many to believe that there actually is something new under the sun, and that our contemporary paradigms are somehow proprietary. My intent is to demonstrate that reader-orientation, an idea (ironically) often compromised by our information-laden society, is both possible

and requisite.

Simultaneously, however, it should also be noted that to think of Joyce in hypertextual terms, which I intend to do, is a creative act; I am creating a literary past to which I would like to be heir. As such, my criticism attempts to avoid perceiving *Ulysses* in relation to the time and place in which it was produced. Rather, it selects, interprets, and evaluates the text primarily from a contemporary standpoint (Perkins 179). The goal is to create a sense of continuity between the past and the present, by emphasizing ideas the two share, which in turn will reinforce the sense of community between today's student of literature and a text of the past. While I make no claims to being a Joyce specialist, what I am trying to achieve in this effort is effectively summed up by Perkins: "The specialist is a citizen of two ages and, thus, can bring one to bear critically on the other" (186). This thesis projects the present into the past; it makes the past reflect contemporary concerns and support contemporary intentions.

To reemphasize my point, then, the exchange between present and past is not unidirectional. It is more correctly described as an animated discussion in which both parties take active roles. Earlier works, for example, do not merely inform our understanding or interpretation of later texts. Invariably, our reading of later texts will have just as dynamic an impact, if not a greater one, on our reading and interpretation of the earlier ones—even ones from which they seem to be derived. The idea of a literary hierarchy is thus supplanted by the notion of a free-flowing exchange between texts, texts that will invariably occupy different places in space and time.

This idea of “different yet simultaneous” is an appropriate point of departure for defining what is meant by “hypertext,” the other key term in my intertextual discussion. Virtual reality and hypertext are developing technologies whose original concept is generally attributed to Vannevar Bush, an electrical engineer who served as Science Advisor to President Roosevelt during World War II. “Our ineptitude in getting at the record,” Bush wrote,

is largely caused by the artificiality of systems of indexing. . . . The human mind does not work that way. It operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain. It has other characteristics, of course; trails that are not frequently followed are prone to fade, items are not permanent--memory is transitory. Yet the speed of action, the intricacy of trails, the detail of mental pictures, is awe-inspiring beyond all else in nature. . . .” (104)

To complement and support his commentary on memory and the human thought process, Bush proposed the Memex, “a device in which an individual stores his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged imitation of his memory” (106). Two decades later, in 1965, Ted Nelson coined the term “hypertext” to describe non-sequential or non-linear text. He defined it as “a body of written or pictorial material interconnected

in a complex way that could not be conveniently represented on paper" (Conklin 22).

Nelson's intention was to define a mechanism for presenting information which more closely resembled the human thought process, which involves free association rather than the linear limitations which he felt that the written word imposes. In *Hypertext: The Convergence of Contemporary Critical Theory and Technology*, George Landow further refined the term. Hypertext is:

that which denotes an information medium that links verbal and nonverbal information. Electronic links connect texts or blocks of a text external to a work as well as within it, and thereby create text that is experienced as nonlinear, or, more properly, as multi-linear or multi-sequential. Although conventional reading habits apply with each text block, once one leaves the shadow bounds of any text unit, new rules and new experience apply.

(4)

Hypertext, then, is presented and understood as an intricate, open web of interrelated information in which both reader and writer work together to create the text. Organization is important in hypertext, just as it is in print documents. Buttons and links help users identify the organizational patterns, allow users to access information successfully, and provide connections that users may note on their own. It is a system of information retrieval that is interactive and intertextual, providing a user with more than one pathway through its files. It is structured in a way that allows users to move along pathways of their own determination, at their own pace, and according to their own



needs.

Several theorists claim that hypertext reconfigures the constructs of text, reader, and writer. Because a hypertext is not linear, it mimics more naturally than traditional printed text the organization of a human mind. Additionally, without the boundaries imposed by print, hypertext systems create an open, unconfined text that contains both intratextual and intertextual connections, and that reflects the intertextual nature of all writing. Hypertext, as exemplified by the World Wide Web, with its numerous multiscreen sites and seemingly endless links, breaks down boundaries imposed by linearity.

The movement through a Web site is generally determined by the user. Links between screens allow a user to read the pages in a different order from the one in which they were written. Networks also provide an example of nonlinear, non-sequential text. Jay Bolter explains:

At any one moment the network holds a vast text of interrelated writings-- the intersection of thousands of messages on hundreds of topics. It is a hypertext that no one reader can hope to encompass, one that changes moment by moment as messages are added and deleted. (29)

When readers respond to messages on a network or alter a hypertext, then, the concept of author is also modified. The organization of hypertext allows the reader more control over a text, and changes the traditional understanding of author. The hypertextual author is more multivocal and less autonomous than the traditional one. Thus, since the reader has more control, the distinction between author and reader becomes blurred. Readers of

both print and electronic text bring individual experiences and understandings. In hypertext, however, the reader is given the opportunity to determine what constitutes his or her text. Each user chooses a pathway through the program, a pathway that might not be duplicated by any other user. Consequently, the user/reader creates a unique text, one which suits the individual's needs.

William Gibson referred to the concept of hypertextual navigation through innumerable pathways as “cyberspace,” the total interconnectedness of human beings through computers and telecommunication without regard to physical geography. Cyberspace, as Gibson says, is the simultaneous experience of space, time, and sensory perception: “All the data in the world stacked up like one big neon city, so you could cruise around and have a kind of grip on it, visually anyway, because if you didn't, it was too complicated, trying to find your way to the particular piece of data you needed. Iconics, Gentry called that” (*Overdrive* 16). The bombardment of data from every “computer” in the human body, Gibson claimed, creates an hallucinogenic effect of “unthinkable complexity. Lines of light ranged in the non-space of the mind, clusters and constellations of data” (*Neuromancer* 51). This description bears a notable similarity to Marshall McLuhan's remarks about electronic information in *The Global Village*:

[Technology] steps up the velocity of logical sequential calculations to the speed of light, reducing numbers to body count by touch. . . . It brings back the Pythagorean occult embodied in the idea that “numbers are all”; and at the same time it dissolves hierarchy in favor of decentralization. . . .

When applied to new forms of electronic messaging such as teletext and videotext, it quickly converts sequential alphanumeric texts into multi-level signs and aphorisms, encouraging ideographic summation, like hieroglyphs. (103)

Gibson's iconics certainly echo McLuhan's hieroglyphs, which in turn appear derivative of Joyce. In *Ulysses*, for example, Joyce sought to take the idea of "book" to a new level, to take it beyond the point to which it had evolved to date. (This transformation is probably best encapsulated in the "Oxen in the Sun" episode, which parodically chronicles the history of written language, from inception to the "birth" of something new.) In lieu of traditional form, Joyce sought to develop a language which would "resituate the book within this new communicative cosmos, while simultaneously recognizing the drive toward the development of a theoretically all-inclusive, all-encompassing medium, 'virtual reality'" (Theall 6).

Like Vannevar Bush, Joyce, too, envisioned a text that was organized like the human mind. One episode in *Ulysses* that stands out as an example of "hypertextual" narrative is "Circe," where several of Joyce's plot-lines and stylistic experiments converge. The episode's density of language and hallucinogenic feel mark it as a section apart from the others, one that draws attention to itself for its virtuosity and for its difficulty. To read "Circe" critically requires referring backward and forward in *Ulysses*, much as a hypertext document entails multiple references within and without the network. This technique of Joyce's was described by Hugh Kenner as "the aesthetic of

delay," a phrase used to describe the way the book comes to its climax. "Circe" and the final two episodes, "Ithaca" and "Penelope"

supply missing facts for so many suspended patterns, momentous and trivial, that a reader who should work carefully through them sentence by sentence, equipped with perfect knowledge of the rest of the book, would experience bewilderment from the very profusion of small elements dropping into place. (79)

What Kenner terms an aesthetic of delay is a move that anticipates the idea of a hypertext. As Landow intimated above, one sees hyperlinks on a page that will take him to another location, perhaps to an explanation of the page he is currently occupying, or to another topic altogether. Such a technique serves as a subtle reminder, lurking somewhere in the reader's subconscious, of the other "realities" existing simultaneously with the one he is experiencing.

In "Circe," Joyce translates this multidimensional, existential world into language by means of the stylistic technique known as stream of consciousness. With this technique, Joyce can call forth an approximation of that multidimensional world in the mind of the reader by using appropriate trigger mechanisms, such as words and phrases. He depicts the numerous characters of the episode in various states of mind: imaginative thinking, memory, reverie, hallucination, relative placidity, and strong emotion. Their thoughts, words, and phrases carry them from scene to scene.

It is midnight at the opening of the episode, and the drinking party which moved

from the hospital to Burke's public-house at the end of the "Oxen of the Sun" section has now adjourned to Nighttown, Dublin's red-light district. Stephen has been abandoned by all of his friends but Lynch. Bloom is tailing him somewhat incompetently from a distance, and they enter Nighttown by train on Mabbot Street. Stephen, drunk on alcohol and absinthe, proclaims "gesture, not music not odour, would be a universal language" (15.105-106). Regardless of Stephen's drunken and drugged musings, it is theatrical gesture indeed that will be the language of "Circe."

Having momentarily lost his quarry and suffering from "brainfogfag" (15.210), Bloom compulsively enters a pork butcher's shop in Nighttown and purchases innards, which he will later feed to a stray dog. Bloom's first hallucination is of a "Gaelic league spy" (220), an agent of the Citizen from Barney Kiernan's. He then encounters the ghost of his father as an exaggerated Jew, "an elder in Zion" (15.248-54), who scolds him for being a spendthrift. He is then haunted by a succession of women: his mother, his wife, and the most recent object of his lust--Gerty MacDowell. Throughout these encounters, we hear the real voice of the Bawd, hawking maidenheads in a Dublin fleshpot.

Next Bloom recalls his earlier encounter with Mrs. Breen. However, his memory of the event dissolves into a fantasy of flirtation and then accusation. As he wanders Nighttown, he wonders if his search for Stephen is a "wildgoose chase" (15.635). In this moment of apprehension and uncertainty he is accosted in an hallucination by two policemen. After failing to evade them with lies, clichéd excuses, and intimations of Masonic power, Bloom is made to stand in a show trial for sexual indiscretions and social

pretensions, most of which he is guilty of only in thought.

Again the play returns to reality with the whore Zoe informing Bloom that Stephen is inside Bella Cohen's brothel. Zoe relieves him of his talismanic potato, and he becomes lost in fantasies of popular acclaim. His increasingly absurd daydreams have him as "Lord Mayor of Dublin" (15.1364), "the world's greatest reformer" (1459), and "emperor-president and king chairman" (1471). He is the munificent ruler of "the new Bloomusalem" (1544). However, Bloom just as absurdly plummets from these lofty heights by abasing himself as hypocrite and masturbator. But he reclaims the sympathy of the people by giving birth to eight male children, all "handsome . . . respectably dressed and wellconducted" (1824). It is the voice of Zoe which once more returns Bloom to reality.

Meanwhile Stephen, prompted by the conversation of the whore Florry, imagines the coming of the Anti-Christ. He then sees his earlier companions as a goosestepping chorus intoning the Beatitudes or, more precisely, "the secular . . . B-attitudes" (Blamires 178) of earthy life: "beer beef battledog buybull businum barnum buggerum bishop" (15.2242-43). After a brief intercession of reality, Bloom's late grandfather Virag arrives by the chimney to aid Bloom in scientifically analyzing the various attributes of the prostitutes. Bloom divides into two personas: the solemn Bloom and the romantic Henry. Nearby, Stephen, influenced by the conversation of Florry and Lynch, transforms himself into a Cardinal.

At this point, Bella Cohen enters the room after servicing a customer, and almost

immediately Bloom is entranced by the "massive whoremistress" (15.2742). Bella is transformed into the masculine Bello, and Bloom is humiliated, tortured, and feminized. A chorus of "The Sins of the Past" (3027) recounts all of Bloom's past sexual aberrations of thought and of deed. He is condemned to "empty the pisspots" (3073) of the whorehouse by day, and by night to be a whore himself. Bella/Bello then taunts Bloom by reminding him that "a man of brawn" (Blazes Boylan) has taken his place in his Eccles Street bed.

As Bloom returns to reality, he immediately demands the return of his potato from Zoe. He also ensures Stephen's money will be protected from the deceitful prostitutes. Stephen himself, however, is lost in remembrance of breaking his glasses at Clongowes and being "pandybatted" by Father Dolan, who appears to speak the same lines he spoke sixteen years earlier (a "hyperlink" which, for the first time in the episode, connects to events recorded outside the text, to Joyce's *A Portrait of the Artist*). Bloom, in one final flight of hallucination, imagines himself present at the scene of his own cuckolding by Blazes Boylan. Bloom becomes an antlered hat stand who escorts Boylan to Molly. Boylan tells Bloom: "Show me in. I have a little private business with your wife" (15.3764-65).

Stephen engages in a "Dance of death" (15.4139), and in his final hallucination in the whorehouse is visited by the ghost of his mother, from whom he seeks absolution for the matricide for which he feels responsible. He leaves the hallucination, though, reiterating his Miltonic mantra "non serviam!" (4228) once again. He climactically

smashes Bella Cohen's chandelier with his ashplant. Again, it is Bloom who defends Stephen from the predatory Bella and pays for the damage--notably what he has assessed as its worth, not what she has demanded.

Stephen flees the brothel and immediately embroils himself in contretemps with two British soldiers, and Bloom, after settling Stephen's damages inside, must try to extricate him from this new threat. "Dublin's burning!" (15.4660) in Stephen's mind as Edward VII, a pantheon of Irish heroes, clerical figures, and martial bands materialize to expand the localized street brawl into a national conflagration.

Stephen is ultimately struck down by one of the soldiers, Private Carr, and Bloom courageously keeps the soldiers from doing further damage to him. When the police arrive, he again bravely testifies against the soldiers for assaulting Stephen. The episode comes to its climax as Bloom, caring for the barely coherent young Dedalus, has a vision of his beloved dead son Rudy.

Stephen Dedalus states in his conversation with Mr. Deasy in "Nestor" that "history . . . is a nightmare from which [he is] trying to awake" (2.377). With this in mind, Hugh Kenner observes that in "Circe" Leopold Bloom and Stephen Dedalus "must exorcise the nightmare of history: Hebraic, Irish, human" (*Ulysses* 118). Throughout "Circe," Bloom and Dedalus confront the nightmares of their lives and emerge in the cab shelter in "Eumaeus" somewhat triumphant.

Bloom journeys to Nighttown ostensibly to watch over Stephen, and does in fact rescue him more than once. However, in the course of the night at Bella Cohen's brothel,



Bloom too must confront the nightmare of his history. Perennially outside, he must engage his own demons--absurd sexual guilt resulting in spousal neglect, insurmountable social frustrations, his wife's unfaithfulness, his son's death, and the standard Irish political problems, compounded by his own Jewish ones. Kenner says, "if Bloom is not crushed by his guilt, his apprehensions, and his frustrations, it is because their energies leak off into fantasy, and as 'Circe' proceeds we may follow him working out a course of psychic purgation" ("Circe" 356). Indeed, Bloom awakens from each of his fantastic digressions and remarkably, as Anthony Burgess observes, "the practical man reasserts himself, shakes off the hallucinations" (161). It is, after all, immediately following Bloom's most intensely masochistic scene that he saves Stephen from being fleeced by the prostitutes. Further, it is after a night of living these horrible scenes in his mind that Bloom is able to take charge of the mayhem following Stephen's destruction of Bella's lamp, and even successfully challenge the "massive whoremistress" herself. Bloom is once more the cool-headed, firm-footed man, who as Kenner says, "managed Stephen's assailants with aplomb" in the incident with Private Carr (*Ulysses* 127).

The cacophony of "Circe" is deliberately disorienting. Joyce's stream of consciousness passages show the mind flowing from one state to another, inner and outer stimuli governing the various states of mind, and individual differences creating different streams of consciousness (Steinburg 60). Like the stream of consciousness in a human mind, Joyce's simulated stream of consciousness is made up of a complex interrelationship of many components: words, sensations, perceptions, and images. In

simulating the stream of consciousness, he runs together words and simulations of sensations, perceptions, and images of various levels of abstraction. Through this series of images, Joyce encourages, indeed demands, the imaginative thinking of the reader. This technique also necessarily creates an impression of complexity: the reader has the option of remaining focused in order to navigate the labyrinth of the mind, or he can abandon himself to the disorderly "arrangement" of the narrative. Whatever the reader chooses, the multidimensionality Joyce creates in this complex episode challenges the linear nature of language (Steinburg 61).

This multidimensionality, the shifts and contrasts of "Circe," constantly fractures any sense of conventional coherence and continuity. It throws the reader off balance rather than encouraging him to make easy assumptions about what and how he is reading. Again, this type of reading experience is very similar to that of reading a hypertext, where a reader can jump to another node simply by choosing a word in the text being read. Unfortunately, performing a jump like this several times in succession can be disorienting to a reader familiar with traditional linear text. Disorientation, a common frustration of first-time readers of "Circe," is also a common frustration of hypertext novices, so much so that a word to describe where one is when lost has been invented: hyperspace. Joyce's penchant for creating neologisms, an idea typified in his complaint to several students that standard English hindered him (Ellmann 397), is a fully realized concept in the information age.

Since the action of "Circe" takes place in a dream world, Joyce can produce an

impressively prophetic imaginary prototype for the virtual worlds of the future. His dream world envelops the reader, producing the rhythmic effects realized through the visual act of reading (Theall 9). The detailed activity Joyce describes as taking place in the minds of Bloom and Stephen becomes a prefiguring of contemporary electronic media.

Joyce, then, creates a new language for a world where literature will deal with those aspects of the imaginary that cannot be described in the medium of traditional print. Simultaneously, as he intimates in the “stage directions” of one of Bloom’s hallucinations (“Wireless intercontinental and interplanetary transmitters are set for reception of message” [15.1500-1502]), Joyce recognizes that a “trend towards virtual reality is characteristic of the electro-mechanically or technologically mediated modes of communication” (Theall 29). This process posits a continuous dialogue in which Joyce designed *Ulysses* to play a key role. Specifically, the cacophony of “Circe” contributes to an understanding of the nature of cyberspace when thought of in terms of the make-up of the electronic world. Joyce understood the relation between an inexhaustible supply of cultural information and the mechanical organization of a network that underlies the creation of fantasy. Of course, Joyce did not have at his disposal the paraphernalia employed today in the creation of technologically-enhanced imaginary worlds. As opposed to the emerging technological capability to create the “virtual reality” of cyberspace, however, Joyce turned to dream and hallucination for the creation of virtual worlds within natural language. In Joyce’s *Ulysses*, the reader (fore)sees an emerging

world where “communication would be. . . fully participatory and pan-sensory” (Theall 31). In other words, Joyce attributed to human mental functions what technicians are now bringing about in cyberspace.

While readers of course experience "Circe" in the traditional way, on the printed page, it is disrupted and made difficult by the continual, allusive jumps in Joyce's stream of consciousness technique. Nonetheless, it is a writerly text. In other words, it enables us to reconfigure its language in various ways that depend on our assumptions about narrative, literary style, and consciousness (Riquelme 140). "Circe," like hypertext, includes allusions to other episodes, as well as allusions to other texts. The reference is at times to a specific action, at times to thoughts a character has had, including memories of past events. For example, at the episode's beginning and the end, the details resemble the order of presentation in the corresponding parts of *Ulysses*. Stephen's entry with Lynch ("Way for the parson") mocks Private Compton (15.65), and the words from the Mass Stephen speaks (15.77, 84, 98) are the midnight transformation of Stephen and Mulligan in the morning, when Mulligan mockingly intones other words from the Mass ("in a preacher's tone" (1.20). The disappearance of Stephen and the arrival of Bloom alone in Nighttown recapitulate the shift from the enigmatic "Proteus" to the more plodding, practical "Calypso," where the reader first encounters the hero. Toward the beginning of Bloom's nighttime wanderings in "Circe," numerous details from the first three episodes of his daytime wanderings are repeated (Riquelme 143).

In *Ulysses*, Joyce provides a solid appreciation of how people constantly

reconstruct or remake reality. He makes his appreciation explicit through the creation and description of the multi-sensory fragments of a “virtual world” like “Circe,” and in the process anticipates the potency of the imminent age of mechanization, and how those powers would be at work in the multimedia that would eventually emerge. Like *Ulysses*, and “Circe” in particular, hypertext, too, is a collection of a myriad disparate thought processes. The information superhighway, where this hypertext resides, is a space where people are intellectual “Blooms”: differentiation, difference, and de-centering characterize its structure.

*Ulysses*, a novel that many first-time readers perceive as chaotic and incomprehensible, nicely illustrates the distinction between immanent and emergent design in a nonlinear system. Joyce imbedded a number of organizational structures in his novel: the Homeric myth, the Hamlet allusions, the Linati schema, and so on. These structures represent the immanent design of the novel, the deterministic structures of the creator, the lawgiver. The gradually emerging details progressively combine into a hypertextual community, as the novel takes on a mind and life of its own, so that it is no mere retelling of the *Odyssey* or *Hamlet*, but something new.

Readers who do make it through *Ulysses*, and who satisfy themselves as to its general plan and purpose then can subsequently appreciate the text as a labyrinth, which they can enter at any point. “To say that one has to live with it,” writes Anthony Burgess, “is not to utter a prejudiced, partisan claim but to state quite objectively that there is enough meat in it to last a lifetime. Its scope is deliberately encyclopaedic and its

subtleties and puzzles require a sort of retired leisure for their working out" (176).

*Ulysses* is a book in which the reader must move back and forth in order to appreciate the complex relationships of its parts. Reading it straight through only to leave it alone will almost ensure a disappointing experience. As Kenner contends:

. . . the text of *Ulysses* is not organized in memory and unfolded in time, but both organized and unfolded in what we may call technological space: on printed pages for which it was designed from the beginning. The reader explores its discontinuities at whatever pace he likes; he makes marginal notes; he turns back whenever he chooses to an earlier page, without destroying the continuity of something that does not press on, but will wait until he resumes. (*Ulysses* 35)

The above statement is almost sure to elicit from anyone the least bit familiar with exploring the World Wide Web the idea of "web-browsing" and creating "bookmarks." Joyce's writing, Kenner seems to be saying, is topographic, and that topographic writing requires a technology that permits the reader to move freely through the text.

*Ulysses* is in many ways the precursor of a new type of reading, reading in an electronic medium. The text asks us to treat a work of fiction as if it were a dictionary or an encyclopaedia--something which we can stop at any point we please, which can be initiated at the end and finished at the beginning, partly read or wholly read. *Ulysses*, like hypertext, is a plot of space for free wandering.

Most of our reading is, in fact, a type of wandering, or "eye-reading," as Burgess

says— the skipping of what seems insignificant, the swallowing whole of the cliché, the tearing out of the sense from the form. If we try to ignore the word-play and parodies in *Ulysses*, however, in an effort to discover what happens next, we are dooming ourselves to disappointment. *Ulysses* is not an action-crammed thriller. It will, however, yield to a reading plan that combines the approach of the ordinary novel reader and the more “rarefied” reader of poetry.

Of course, Joyce places an enormous burden on his reader. The superstructure of the final text alone is taxing; the layers of genesis are even more so. He employs nearly every technique available in the repertory of print: experimenting with technique, with the layout of text, or recapitulating the history of those techniques by using various styles of type, and even by including musical notation in his text (Bolter 137). But Joyce's narrative strategy is too complex and too dynamic for most readers to negotiate in the medium of print. His text proved to be a rich source of experimentation for writers in the new medium of hypertext.

To conclude, then, there are several reasons why James Joyce's *Ulysses* is germane to a discussion involving hypertext. First, *Ulysses* is an in-depth modern examination of the complexities of reading, writing, and rewriting. Joyce himself admitted as much when he boasted of packing his text with enough puzzles and enigmas to keep academics reading, writing, and rewriting to perpetuity. Second, *Ulysses* models a non-linear ideal of reading and writing that anticipates and almost demands the invention of the computer, hypertext, and the Internet (“Poets are the unacknowledged

legislators of the World,” said Shelley [508]). Finally, in *Ulysses*, Joyce, as Eliot insisted, “killed the 19<sup>th</sup> century, exposed the futility of all styles” (Ellmann 528), and developed one of the most complex discussions of the contemporary transformation of our media of communication.



Click to Open William Faulkner

Sometimes I think there must be a sort of pollen of ideas floating in the air, which fertilizes similar minds here and there which have not had direct contact.

- William Faulkner, quoted in *The Dallas Morning News*

The existing order is complete before the new work arrives; for order to persist after the supervention of novelty, the whole existing order must be, if ever so slightly, altered; and so the relations, proportions, values of each work of art toward the whole are readjusted; and this is conformity between the old and the new.

- T.S. Eliot, "Tradition and Individual Talent"

In his letters, criticism, and fiction alike, William Faulkner demonstrated an awareness of how popular culture constantly changes as the whole culture is also changed. Few, if any, generations of Americans had witnessed more obvious and radical changes than William Faulkner's. In his lifetime, electricity, the telephone, radio, the automobile, the airplane, motion pictures, and television changed and evolved, rapidly, from newly invented oddities to universal, entirely mundane, and, finally, necessary commonplaces.

It is Faulkner's awareness of the effects of popular culture that make it appropriate to discuss two of his novels, *The Sound and the Fury* and *As I Lay Dying*, within the

context of technology, hypertext, and virtual reality--the late 20<sup>th</sup> - and early 21<sup>st</sup> -century counterparts to the technological revolutions Faulkner witnessed during his lifetime. The first book is composed of four disparate, non-linear sections, each of which tells, in Faulkner's terms, "the same story" from a different perspective: an idiot's, a bitter, suicidal prophet's, a belligerent racist's, and an omniscient narrator's. *The Sound and the Fury* was published in October 1929, just three weeks before the devastating stock market crash. At the time of this writing, the stock market is once again at dizzying speculative heights, prompted in large part by unprecedented gains in companies which traffic in the very technology for which, I contend, Faulkner's art longed.

*As I Lay Dying*, meanwhile, consists of 59 polyphonic sections, each headed by the name of one of the fifteen first-person narrators, and exhibits striking variations in tone: we hear the dialect of poor white Mississippi farmers, the talk of small-town shopkeepers, tense and fast-paced narrative, and richly metaphoric digression, in narrative sections that range from one sentence ("My mother is a fish") to ten pages of elaborate Faulknerian rhetoric.

Some may argue that the connection between Faulkner and technology is a tenuous one. However, it now seems almost elementary to suggest that few technological advances over the last century have compared to the Internet. Indeed not since the invention of the telegraph has the world so rapidly shrunk. The Internet and its attendant technology have greatly facilitated people's ability to converse with each other, and to learn about whatever topics interest them more quickly and effectively than ever before.

Many people today attribute the advance in communications and the paradigm of a hypertextual society to a relatively small group of electronics hobbyists in the 1960's and 70's. I contend, however, that some of the themes and motifs expressed by modernist writers, such as multiplicity, fragmentation, infinity, and originality, contributed to the contemporary paradigm of the World Wide Web. The two Faulkner texts I will examine are typical of such an influence. They are texts whose series of alternating points of view, manipulation of tenses, and bending of time make them clear examples of books that yearn for hypertext. I will explore the aforementioned features of the novels in an effort to reveal what amounts to an intertextual relationship between a contemporary notion of "hypertext" and Faulkner's two texts.

Faulkner, though he knew and could imagine the past as well as any artist, had what one critic calls a "prescience, a prophet's dreamlike flashing awareness" of what the future was most likely to bring (Garrett 65). One example of his prophetic power is contained in a 1935 book review of *Test Pilot* by Jimmy Collins. In it, Faulkner turned to the idea of a folklore of speed, a folklore of the future which certainly encompasses the environment we have since come to live in, a world at home with such concepts as "virtual reality" and "information superhighway":

[The future] would be a folklore not of the age of speed nor of the men who perform it, but of the speed itself, peopled not by anything human or even mortal but by the clever willful machines themselves carrying nothing that was born or will have to die or which can even suffer pain,

moving without comprehensible purpose towards no discernible  
destination. . . . ("Folklore" 372)

I would not suggest that what Faulkner has in mind here is a vision of what we know today as the Internet. However, the parallels between Faulkner's vision of the future and our present are striking. Hypertext mark-up language, the program language of the Internet, is the medium for that machine-based folklore; it is the space in which that "folklore" is transmitted. At first glance, the above statement may suggest that Faulkner's vision of the future was a bleak one, without "comprehensible purpose" or "discernible destination." These phrases, however, are good departure points for an examination of *The Sound and the Fury*, as they are reminiscent of some of the criticism reserved for the novel shortly after its publication.

"When I began [*The Sound and the Fury*]," Faulkner noted, "I had no plan at all. I wasn't even writing a book" ("Introduction" 709). Additionally, he felt free from any external pressure or constraint; he did not even care about getting published. His inability in previous literary efforts to appeal to a wide audience and thus garner financial success led him to disregard the expectations of his potential public, as well as the often onerous editorial requirements of publishers (Millgate 26). *The Sound and the Fury*, then, was to be a matter between Faulkner and his own private cosmos (Matthews 19). "One day," Faulkner conceded, "I seemed to shut a door between me and all publishers' addresses and book lists. I said to myself, 'now I can write'" (*Southern* 709). It was as if Faulkner had begun an interactive journey of sorts: he commenced with nothing but a

fragment of a concept. He experienced what he described as an “ecstasy, that eager and joyous faith and anticipation of surprise which the yet unmarred sheets beneath [his] hand held inviolate and unfailing” (*Mississippi* 415), a feeling similar to the one which the web-surfer experiences as he waits for the plug-ins to load on his web browser, or as he awaits the next link to up-load to the screen in front of him. For Faulkner, every stylistic and narrative move was determined not by any preconceived notion, but was instead shaped only by what he had already achieved and written, what already lay before him. The following lengthy quotation, excerpted from an interview, illustrates how the process Faulkner employed while writing the novel is similar to that of one who interacts with a hypertext.

[*The Sound and the Fury*] began as a short story, it was a story without plot, of some children being sent away from the house during the grandmother’s funeral. They were too young to be told what was going on and they saw things only incidentally to the childish games they were playing, which was the lugubrious matter of removing the corpse from the house, etc., and then the idea struck me to see how much more I could have got out of the idea of the blind self-centeredness of innocence typified by children, if one of those children had been truly innocent, that is, an idiot. So the idiot was born and then I became interested in the relationship of the idiot to the world that he was in but would never be able to cope with and just where could he get the tenderness, the help, to

shield him in his innocence. I mean “innocence” in the sense that God had stricken him blind at birth, that is, mindless at birth, there was nothing he could ever do about it. And so the character of his sister began to emerge, then the brother, . . . Jason (who to me represented complete evil. He’s the most vicious character in my opinion I ever thought of), then he appeared. Then it needs the protagonist, someone to tell the story, so Quentin appeared. By that time I found out I couldn’t possibly tell that in a short story. And so I told the idiot’s experience of that day, and that was incomprehensible, even I could not have told what was going on then, so I had to write another chapter. Then I decided to let Quentin tell his version of that same day, or that same occasion, so he told it. Then there had to be the counterpoint, which was the other brother, Jason. By that time it was completely confusing. I knew that it was not anywhere near finished and then I had to write another section from the outside with an outsider, which was the writer, to tell what had happened on that particular day. And that’s how that book grew. That is, I wrote that same story four times. (*Interviews* 147)

Like *Ulysses*, a section of which was examined in the previous chapter, *The Sound and the Fury* began by taking the form of a short story in the mind of its creator. Faulkner saw the novel form as a concession of sorts, and the entire book may thus be seen (at least by Faulkner) as an inherently flawed effort, in that he was incapable of completing

the narrative within the confines of short story form, which he considered “the most demanding form after poetry” (*Interviews* 238). Futility informs the configuration of the text, since its four sections each represent vain attempts to tell the story. Most readers will of course dismiss this confession of Faulkner's as false modesty. Faulkner's assertion that his efforts were in vain was not a pose, however. The commercial and critical frustrations he experienced during the writing and after the publication of his three previous novels had taught him that “being a writer is having the worst vocation . . . a lonely frustrating work which is never as good as you want it to be” (*Interviews* 220-221). Like the hypertextual web surfer, there is a joy in not always knowing “where you're going;” but the journey is, after all, a lonely one.

The book's first section is told from the point of view of Benjy Compson, a thirty-three-year-old idiot who recounts via flashbacks the earliest events in the novel. His non-linear narrative is difficult to follow, and invariably many a first-time reader finds himself feeling hopelessly confused and frustrated. Needless to say it is imperative to resist the temptation to conclude that the section confounds comprehension. Indeed, most sentences in it are perfectly grammatical, and taken one by one, nearly all of them make sense. Additionally, reported dialogue, which in turn develops into scenes or parts of scenes, takes up more than half of Benjy's section—a monologue that is more “polylogic” than “monologic,” in that it consists of the speech of many characters, randomly recorded by a seemingly unselective mind. Yet Benjy's language, Andre Bleikasten observes, stands out the more startlingly for being interwoven with the speech

of others. "Throughout the section," he states, "it serves as a private code meant to suggest the workings of a severely limited mind" (68).

The private code to which Bleikasten alludes, however, is not synonymous with encryption; Benjy's language is not designed to deliberately confuse the reader or distort issues. For the most part, his language is simple; it contains short sentences and basic vocabulary. However, reading this section is difficult, because Benjy has no concept of time or place. Other sensory stimuli (for example, sounds and smells) cause him to flash back to another time and place in his past, instantly and without warning. The reader, meanwhile, is alerted to these instantaneous flashbacks only by a change in typeface from Roman to italic. Faulkner's rationale for this technique is a simple one: "To that idiot," he said, "time was not a continuation, it was an instant, there was no yesterday and no tomorrow, it all is this moment, it all is [now] to him. He cannot distinguish between what was last year and what will be tomorrow, he doesn't know whether he dreamed it, or saw it" (*Interviews* 147-48). Simply put, Benjy is not conscious of time. Rather, Benjy lives in a temporal limbo, a hyperspace in which the past and present confusingly echo each other (Boughton 188). Masked behind the apparent confusion of this section is a thickened, "stacked" time, a time arranged, in Bakhtinian terms, "chronotopically." Time thickens, and begins to take on spatial characteristics. The relationships that are depicted and developed from random scenes scattered over many years replaces traditional, linear narrative. Past and present as well as distinct time units within the past are counterpointed to suggest both continuities and contrasts. Scenes or fragments of scenes



separated in time tend to fall into groups sorted according to their common components.

The Benjy section comes first in the novel for the simple reason that Benjy, of all the narrators, cannot lie. His monologue is a series of frozen pictures, depicted with utmost objectivity: "Through the fence, between the curling flower spaces, I could see them hitting" (3); "'What do you want' Jason said. He had his hands in his pockets and a pencil behind his ear" (8); "The cows came jumping out of the barn" (13). This quality of Benjy's memory demonstrates the fact that he does not recollect the past; rather, he relives it:

"Wait a minute." Luster said. "You snagged on that nail again. Cant you never crawl through here without snagging on that nail."

*Caddy uncaught me and we crawled through. Uncle Maury said to not let anybody see us, so we better stoop over, Caddy said. Stoop over, Benjy.*

*Like this, see. We stooped over and crossed the garden, where the flowers rasped and rattled against us. The ground was hard. We climbed the fence, where the pigs were grunting and snuffing. I expect they're sorry because one of them got killed today, Caddy said. The ground was hard, churned and knotted.*

*Keep your hands in your pockets, Caddy said. Or they'll get froze. You don't want your hands froze on Christmas, do you.*

"It's too cold out there." Versh said. "You don't want to go out doors" (3-4).

The sequence begins in the present, April 7, 1928, with Benjy and Luster, one of the Compson family's servants, crawling through a fence to get to the branch, where Luster hopes to find a golf ball. It shifts to a winter day of Benjy's childhood, when he and his sister Caddy are also crawling through a fence on their way to deliver a note from their Uncle Maury to Mrs. Patterson. The scene shifts again to earlier the same day, before Caddy has come home from school. As stated above, these shifts are triggered by sensory perceptions; a nail, a fence, the coldness—some object or quality that abruptly springs Benjy into a different time zone, each one of which is as alive and real for Benjy as the present. Instead of past and present being a continuum, each influencing the meaning of the other, they have no temporal dimension at all (Singal 25).

The second section is told from the point of view of Quentin and shifts back from the external chronology of the first section to that of the day of Quentin's suicide, June 2, 1910. Whereas the first section of the novel closes with Benjy slipping peacefully into the unconsciousness of sleep, Quentin experiences a painful awakening: day brings with it the nightmare of time.

From the moment Quentin awakes, he is aware of his being trapped in time. This awareness is all the more acute as Quentin realizes that this dawn will be his last. Each passing minute of that day will bring him closer to the moment of death. Yet Quentin does not capitulate to the powers of time without a fight, albeit an impotent one. Indeed, he tries at first to outwit time. Could he manage to forget it, he would be saved: his suicide would thus be preventable. Time, he quickly concludes, will not let itself be

forgotten, however: "I don't suppose anybody ever deliberately listens to a watch or a clock," he muses. "You don't have to. You can be oblivious to the sound for a long while, then in a second of ticking it can create in the mind unbroken the long diminishing parade of time you didn't hear" (55). Quentin, much like Benjy, does not *have* a memory; to a large extent, he *is* memory, so much so that he tends to forget that the past *is* past, and the hallucinatory effect of his intermittent traces of memory sometimes obliterates the present moment. Quentin makes his agonizing self-consciousness about the unrepeatable, unstoppable flow of time quite evident: as Matthews observes, Quentin above all desires "an apotheosis of the temporary" (85). He tries to transform this desire into reality by "temporalizing space [and by] spatializing time" (Bleikasten 124)

In his essay "On *The Sound and the Fury*: Time in the Work of Faulkner," Jean-Paul Sartre described this dismantled, exploded time of Faulkner's:

One present, emerging from the unknown, drives out another present. It is like a sum that we compute again and again: "And. . . and. . . , and then."  
Like Dos Passos, but with greater subtlety, Faulkner makes his story a matter of addition. Even when the characters are aware of them, the actions, when they emerge in the present, burst into scattered fragments.  
(81)

To re-write experience into something he can bear, then, Quentin constructs a chronotope like the one that Bakhtin calls "historical inversion," narrating his desires back into history in order to make them true (147). Consider, for instance, his absurd

fight with Gerald Bland: the scene is recounted not by Quentin but by his friend Shreve; Quentin no longer knows why he tried to hit Bland (101); he seems to emerge from the fight as from a confused bad dream, and everything indicates that he is scarcely conscious of what has happened to him. However, we immediately learn (through his friend Spode) that before the incident Bland had boasted about all his girls, and before striking him Quentin had asked: "Did you ever have a sister? did you?" (101). A year earlier Dalton Ames had likewise offended feminine honor, and Quentin had then asked exactly the same question (98). Without being aware of it, Quentin has identified Bland with his sister's first lover, and this identification has sufficed to tip the present into the past. While being beaten up, Quentin relives a scene of his past, and the drubbing he is given by Bland revives once again the humiliating experience of his utter helplessness before his rivals. Quentin's monologue reads like a palindrome: events of his life open, backward and/or forward, onto other events resembling them (Broughton 95).

Section three is told by the third Compson brother, Jason, and is set on April 6, 1928 (Good Friday). Unlike his brothers, Jason is much more focused on the present, offering fewer flashbacks, though he does have a few and he refers frequently to events in the past. The tone of Jason's section is set instantly by the opening sentence: "Once a bitch always a bitch, what I say" (109). Jason is a sadist, and his cynically humorous section reveals just how low the Compson family has sunk—from Quentin's obsessions over heritage, honor, and sin to Jason's near-constant cruelty, complaints, and scheming.

As was the case earlier in the novel, this section also reflects a rough chronological

advancement. However, the focus now is not on Caddy (though she does appear in a few flashbacks and she often is the subject of Jason's pointed remarks), but rather on her daughter, Quentin, who came to live with the Compsons following Caddy's divorce and who is now, like Caddy in Quentin's section, entering into adult sexuality. Much of Jason's section is about his trying to track her down when she skips school to be with a man associated with the circus then in town. For first-time readers of the novel, however, Jason's section is the point where the difficulties of Benjy's and Quentin's sections begin to make sense. In hypertextual terms, the "links" that are embedded in those earlier sections can only be comprehended upon the reading of this section. Among the "discoveries" here are that Quentin drowned himself, that Benjy is a "gelding," that Caddy was divorced and that her daughter, also named Quentin, has come to live with the Compsons. Other things, too, are revealed more clearly: Mrs. Compson's hypochondria, Mr. Compson's alcoholism, and, especially, Jason's meanness and greed. For years, Caddy has been sending money to her daughter, and since Mrs. Compson has forbidden Caddy's name from being mentioned in the house, she has likewise forbidden her receiving Caddy's money. To overcome this hurdle, Jason gives Mrs. Compson duplicates of Caddy's checks (for Mrs. Compson to burn ceremoniously) while he cashes the actual checks and pockets the money, giving little or none of it to his niece.

Quentin and Jason are alike in that their extreme solipsism and delusion are destructive to themselves and to others. For the same reasons, they also fail to come to terms with the world in which they live, and nothing illustrates this fact better than their

common failure to conquer time (Boughton 47). Jason, of course, does not break his watch; he is not haunted by scenes of his childhood as Quentin was, and he shows nothing but sneering contempt for tradition. Yet he is trapped by the past as his brothers are, and although not obsessed as they are by memory, the “outrage” he suffered when Caddy deprived him of the promised job is still an open wound. In his monologue, flashbacks are far less numerous than in Quentin’s, but in the one major shift to the past, his thoughts return significantly to his sister (122-24). What sets him apart is that instead of brooding endlessly on Caddy, he takes active steps to “rectify” the consequences of the affront. Where Quentin was haunted by an irretrievable past, Jason is obsessed with a lost future which he is at pains to restore. The future he runs after will be the time of revenge, the ultimate day of triumph when he will at last settle his account with the past.

Life, from Jason’s point of view, then, is more a matter of trying to catch up with time, as opposed to escaping it. In the third section of the text the reader observes Jason continually shuttling between the store, the telegraph office, and home. In the fourth section, the reader sees Jason in frenzied pursuit of his troublesome niece and her lover. These images work together to create the impression that Jason’s life is nothing but a long and exhausting race against the clock. Jason is always on the alert, always in a hurry, wildly dashing from place to place without ever getting anywhere on time. He spends all his energy in sheer waste. Unforeseen and uncontrollable incidents occur at every turn and develop into a series of exasperating, awkward mishaps: Jason arrives at the telegraph office an hour after the cotton market has closed; he has run out of blank

checks when he needs them to deceive his mother once more; he “just misses” catching his niece and her carnival lover, and so on. Jason’s “progress” in life is inversely proportional to his activity. In the end, the reader (like Jason) is forced to realize that the gulf that exists between Jason’s present and the future, in which all past grievances will be addressed, will never be bridged (Bleikasten 162).

Since Faulkner, by his own admission, failed to tell his story through the three Compson brothers, he resolved “to write another section from the outside with an outsider, which was the writer, to tell what had happened on that particular day” (Gwynn 32). The voice given to this outsider, however, is not exactly one of an impartial, dispassionate observer. It is true that the reader moves from the private worlds of the three brothers to a more communal one. However, meanings are only suggested. Faulkner’s method in this section is one of conjecture, and its tentativeness is evidenced by the recurrence of comparative-conditional clauses (introduced by “as if” or “as though”) and words or phrases denoting uncertainty (“seemed,” “appeared,” “it might have been”). In this respect, section four differs notably from the preceding ones. The first section gives us raw facts and raw emotions without discernible meaning; in the second and even in the third, self-centered narrators distort facts altogether; only the last section avoids the poles of cold objectivity and hallucination (Bleikasten 176).

At the novel’s conclusion, “order” is restored, but it is as empty as Benjy’s idiotic stare or the petrified gaze of the Confederate Soldier (190). In terms of plot, this ending is no ending at all. The final scene with Jason and Benjy puts an arbitrary stop to the

action. No dramatic resolution, whether tragic or comic, is provided; the tensions built up over the course of the story still exist, and the novel's complexities and ambiguities are as still confusing. As in so much of modern fiction, the knots are not untied. The last section does not provide a perspective the reader hopes for, in which the disparate earlier sections could be seen as parts of a coherent and understandable whole. Instead, the reader experiences a bafflement at the novel's close similar to that of Benjy's sense of panic and disorder. All the reader can do is to return to the beginning and attempt another reading of the book—with little hope ever to find out its supposed secret. Yet the impossibility—for author and reader alike—of reaching a safe conclusion does not imply the absence of all closure. *The Sound and the Fury* is open-ended as far as plot is concerned, and it is inconclusive in its meaning. But this does not prevent it from achieving a beauty of its own. The text of *The Sound and the Fury* holds together, and achieves admirable integrity as an aesthetic design. And while the furious and helpless voices of the Compson brothers exhaust themselves, the incompleteness of *The Sound and the Fury* waits for readers and requires their active participation. Provided the reading of the novel is not "mindless consumption," Andre Bleikasten observes, [the reader], too, will take part in the unending process of its production. Reading and rereading the book, the reader will write it again" (206). The ending of *The Sound and the Fury* refers us back to the text itself, that is, to a tissue, a web of words, in which meanings are kept at bay.

The idea of keeping meanings at bay is implicit in a hypertext. Like *The Sound*



*and the Fury*, hypertext, too, refers back to itself, through connections and links located on the screen. "Meaning," such as it is, is deferred. Once one returns to other links, the possibility of returning to the same place with the same mindset is nullified. The fourth section of the novel reads like a site map to the text. It is both a means of orientation and also an impetus to re-explore. One returns to the text of *The Sound and the Fury* perforce, in an effort to understand how the Compson family arrived at the place where we see them in the last pages of the novel. Where did they go wrong? Why do they act this way? Why is Jason so mean? Does Benjy feel? These are all questions which are impossible to answer without re-examining the text itself. Each re-examination will help formulate new answers, and invariably stimulate new trains of thought. Just as the Internet web-surfer resurfaces from his somnambulistic journey in cyberspace and asks, "How did I get here?" so too does the reader of *The Sound and the Fury* question his arrival point. The answer, such as there is, can only be reached by plunging back into the text.

At the time of the book's publication, however, the idea of keeping meanings at bay was a controversial one. Consequently, a number of early reviewers of *The Sound and the Fury* took it and its author to task for what some contended was deliberate obfuscation. Others, such as *Nation* critic Clifton Fadiman, described Faulkner's characters and themes as too "trivial" to justify "the enormous and complex craftsmanship expended on them" (qtd. in Minter ix). It was perhaps with this criticism in mind that Faulkner approached his next novel, *As I Lay Dying*. As stated at the

beginning of this chapter, the book consists of 15 different narrative points of view, presented in 59 separate narrative sections. The first-person speakers appear in unmediated juxtaposition, and tell their own fragmentary versions of the burial journey of the Bundren family. The characters are not introduced or evaluated by any single, controlling narrator. While one of the Bundren boys (Darl) emerges as the dominant, most poetic of the cast, a hierarchy of narrators is not apparent. As the story is told in so many fragments, it is necessary to summarize it briefly so as to both provide a clear picture of the polyphonic, atomized text, and to gloss some of the remarkable characters contained therein.

As the novel opens, Addie Bundren lies dying in her bed in her family's farmhouse. Neighbors come to visit, while outside her oldest son, Cash, works sawing and hammering together her coffin. Her second son, Darl, convinces his brother Jewel (Addie's third son) to go with him to pick up a load of lumber. Though he realizes Addie will probably die before they return, he convinces his father, Anse, that it is okay because "It means three dollars" (14). Darl's apparent goal is to make sure that Jewel, Addie's favorite son, will not be at her side when she dies.

While Addie's daughter, Dewey Dell, stays with her, Addie's youngest son, Vardaman, goes fishing and catches a very big fish, which Anse tells Dewey Dell to cook for their dinner. (Later, Vardaman begins to confuse the fish with his dead mother, resulting in Faulkner's shortest, and one of his most famous--or infamous--chapters: "My mother is a fish" (54).)

Dr. Peabody arrives at the Bundrens' house just in time to watch Addie die, and in outrage Vardaman chases away his horse and wagon. Just after Addie's death a violent storm breaks, and Darl's and Jewel's lumber-laden wagon loses a wheel in a ditch. Meanwhile, young Vardaman drills holes into the coffin lid (so his mother can breathe), and inadvertently drills into her face. By the time the coffin and the wagon's wheel are repaired, three days have passed, but, finally, the family can set off on their journey to bury Addie.

Years earlier, shortly after Darl was born, Addie had asked her husband to bury her in Jefferson, where her "people" were from, when she died. It is with the intention of keeping the promise he made to Addie that Anse sets off with his children toward Jefferson.

As the novel's plot proceeds in stop-start fashion through the discrete monologues by the various speakers, more and more information is revealed about the Bundrens, their grief, and their society. The most conscientious Bundren, as well as the most detached, is Darl — who, it turns out, has always been regarded as odd by those who know him. Nevertheless, he is near-omniscient in his knowledge about his family: he knows, for instance, that his sister Dewey Dell is pregnant, and he also intuits that Jewel is only his half-brother — that he is not Anse's son.

All of the Bundrens except for Darl and Jewel have ulterior motives for wanting to go on the long journey to Jefferson. Anse, the most selfish of them, wants a new set of teeth. Cash wants a phonograph (or as he calls it, a "graphophone" (48)). Vardaman

wants to get a toy train. Finally, Dewey Dell wants to get an abortion (with the ten dollars that Lave, the father, has given her).

Their first major hurdle in their journey is the flood-swollen Yoknapatawpha River. They go well out of their way to one bridge, which has been swept away, then return to a bridge closer to home, which is likewise damaged by the flood. They nonetheless decide to chance crossing — which turns out to be a mistake. In the process, Cash's leg is broken and their mules are drowned; it is only by sheer strength (or rage) that Jewel is able to keep Addie's coffin from being swept away as well.

Now that the Bundrens are muleless, their neighbors believe Anse will want to borrow their mules. Anse has something else in mind, however. He makes an arrangement to trade Cash's eight dollars (which he had planned to use to buy the phonograph) and Jewel's beloved horse, which Jewel had worked many nights to obtain and which he treats more kindly than most human beings, for a new team of mules.

To continue their journey, the Bundrens have to go south to "Mottson" in the neighboring county and then head north along the main road to Jefferson. While in Mottson, they are treated with ever-increasing outrage: Addie's decomposing body is beginning to smell and to attract buzzards. Dewey Dell tries to get an abortion but she is rebuffed by a morally upright and law-abiding pharmacist. To doctor Cash's broken leg, Anse buys some cement and uses it to place a cast on Cash's leg.

About midway between Mottson and Jefferson, the Bundrens spend a night at Gillespie's place. During the night, the barn where Addie's coffin is being stored catches

fire, and again it is saved only by the ferocity of Jewel's efforts. Vardaman reveals that he had seen something, but Dewey Dell tells him not to repeat it.

Nine days after Addie's death, the Bundrens finally arrive in Jefferson. Anse borrows some shovels from a "duck-shaped" woman to dig her grave, and finally his promise to Addie has been fulfilled. Cash is sent to the doctor, and Darl — who we discover set the fire in Gillespie's barn to put their outrageous journey to an end — is sent to the mental asylum in Jackson to avoid the Bundren's being sued by Gillespie.

Vardaman looks in the store windows for the toy train, but it is nowhere to be found. Dewey Dell finds a pharmacist who says he will help her, but instead he tricks her into granting him sexual favors. Anse convinces her to give him the ten dollars that Lave had given her which he uses to buy a new set of teeth. As the novel ends, he re-appears before his family with the duck-shaped woman — who happens to own a phonograph — and introduces her by saying, "Meet Mrs. Bundren."

It is true that the Bundrens stick together as long as their survival as a family is at stake. Their solidarity in the face of outside danger, however, serves only to mask the conflicts smoldering within the family. As Calvin Bedient notes, the Bundren family is "a terrible and frustrating unit of interlocking solitudes, atomic in structure like a molecule" (63). Family relationships in Faulkner, as was witnessed in *The Sound and the Fury*, are seldom idyllic. This novel, setting against each other husband and wife, mother and son, father and daughter, brother and brother, and brother and sister, presents almost the whole range of possible tensions.

I should note that, in addition to the family strife demonstrated in both the novels, the composition of the Bundren family reproduces a pattern already used in *The Sound and the Fury*: again there are several sons and one daughter. Faulkner himself saw in this similarity the only link between the two books: "If there is any relationship it's probably simply because both of them happened to have a sister in a roaring gang of menfolks" (*Interviews* 188). The novels resemble each other much more than Faulkner was willing to admit, however, and the unmistakable "family likeness" between them is all the more arresting as they also share similarities in narrative design and technique. Apart from the last section of *The Sound and the Fury*, both novels consist entirely of unframed and seemingly uncoordinated "interior monologues" and are indeed the only ones in the Faulknerian corpus to rely so heavily on "stream of consciousness" (Matthews 43).

However, *As I Lay Dying* is not simply a mosaic of monologues. Indeed, nearly all the monologues themselves are patchwork pieces. Who is speaking, and to whom? These questions are already raised in *The Sound and the Fury*, wherein each of the four sections, labeled only by a date, leaves it to the reader to find out who is actually speaking. In *As I Lay Dying*, each of the sections is headed by a proper name, so that the speaker can be identified immediately. Yet our perplexity is perhaps even greater here than in *The Sound and the Fury*, in that the characters are often endowed with knowledge and articulation of which they could not be capable.

In addition to all these oddities and paradoxes there is the novel's extreme fragmentation. Whereas in *The Sound and the Fury*, the monologues are arranged in

large, compact blocks, here they are split into brief sequences. The longest section is seven pages; the average two to four pages; and the shortest the mere five words "My mother is a fish" (54). This disjointedness, increased by the swift, almost kaleidoscopic rotation of the sections, has of course a disruptive effect on the reading experience. Each new soliloquy catches the reader off balance, and even though he has a plot to help him out, he is obliged to engage in continual readjustments if he wants to follow the narrative through all its twists and turns. This situation is reminiscent of Bloom's and Stephen's hallucinogenic journey through Nighttown in the "Circe" episode of *Ulysses*. As in that episode, *As I Lay Dying* also requires constant reorientation on the part of the reader so as to avoid the feeling of being lost in "hyperspace." Under such circumstances, the customary pleasures of novel reading are potentially jeopardized: the reader flits from one point of view to another without ever settling on any, so that imaginary identification with any of the characters becomes highly improbable. *The Sound and the Fury* plunges the reader by turns into the "stream of consciousness" of Benjy, Quentin, and Jason, and the immersions last long enough to allow the reader to adopt a character's point of view. In *As I Lay Dying*, the immersions are so brief that the "stream" does not carry the reader along. He observes the Bundren family members throughout the course of their journey and listens to them, but he never ceases to be part of the audience. In the earlier novel the reader witnesses, in Bakhtinian terms, a "stage without footlights," where the distinction between audience and participant is blurred (*Rabelais* 7). In *As I Lay Dying*, the reader only engages in remote observation; he is always audience. He "watches," as it were, as

Faulkner's numerous speakers fuse into a collective desire to escape repetition. The repetition they mean to obviate is the vicious circle of rejection, despair, poverty, and sorrow that characterizes Faulkner's South.

The characters of Faulkner's novel desperately seek something else, something other than their current plight: Darl seeks his mother's acceptance, a fact not lost on the family's well-meaning, if not over-zealous, friend Cora Tull. "[Darl] come to the door and stood there, looking at his dying mother," she observes. "He just looked at her, not even coming in where she could see him and get upset, knowing that Anse was driving him away and he would never see her again. . . . He just stood and looked at his dying mother, his heart too full for words" (15). Dewey Dell, meanwhile, the only daughter in the woeful Bundren clan, seeks to be rid of her unborn child. And Anse, the parasitic family patriarch, seeks for himself a set of teeth and a new wife.

This idea of "something else" that is so explicit in *As I Lay Dying* is at the very heart of hypertext; the implication that there is something else "in there," that there is more to existence than "meets the eye." A hypertext requires further questioning and evaluation; multiplicity is implicit. Opening a link will lead to new horizons and ideas. There is more to the text than what appears on the surface. Like hypertext, the polyphonic narratives of *As I Lay Dying* ask questions that are not explicitly answered in the text. Despite the many insights we are offered into the characters' most secret thoughts and feelings, their motives often remain unclear. For example, why did Addie marry Anse? We are not even told how much they know about each other, which



prompts other (unanswered) questions: does Anse know about Addie's adultery? Does Darl know who is Jewel's father? Further questioning is even prompted by the book's title, itself a cryptic reference to something else. As Joseph Uργο points out, the title asks of the reader:

What is happening "as I lay dying," or what am I like "as I lay dying"? What is signaled by the "as" in the title? The "as" immediately suggests that something is occurring "while" someone is dying. The temporal simultaneity, however, is complemented by the suggestion of a phenomenological simultaneity, based on the frequency of metaphor and simile in the novel. What is death like? (67)

As the text begins to take shape for the reader, as he attempts to create meaning for himself while the disparate narrators spin their own versions of the story, the idea that there is "something else," another existence, at some level beneath the surface of the text, becomes apparent. This existence, in hypertextual terms, is ostensibly just a click away. What is left unanswered, even at the conclusion of the novel, however, is the question of whether any of the Bundren clan possess the energy to move themselves from their current plight to another plight. Nonetheless, the fact remains that each of the characters in this story uses his/her section as a virtual forum to tell his/her story, and to articulate how he/she engages in a personal struggle with others, with life, and with time.

The novel in some ways prefigures the harried pace of life that is the hallmark of 21<sup>st</sup>-century existence. It is founded on an acceleration of the normal pace of life. As

another family friend, Vernon Tull, observes, their collective setting is a place where "everything hangs on too long," where everything loses all stability, only to become a "place where the motion of the waste world accelerates just before the final precipice" (44). The Bundren family gets caught up in a world in which everything is going too fast.

Faulkner highlights this constant struggle between his characters and time throughout the novel with his frequent manipulation, confusion, and bending of time. One of the ways he attempts to create this effect is through his seemingly arbitrary uses of the past and present tenses. He changes tenses within a single chapter quite frequently and often emphasizes the changes with a shift in typeface. He also multiplies and accentuates the seeming anachronisms and discontinuities. One such signal of discontinuity is the placement of Addie's monologue, her only one, at a point in the novel when she has already been dead five days. Another instance is later in the novel, when her son Cash casually refers to "Mrs. Bundren's" house in Jefferson. "[Jewel] set that way all the time we was in front of Mrs. Bundren's house, hearing the music, watching the back of Darl's head with them hard white eyes of hisn," Cash observes, some twenty pages before Anse's proud announcement, and the novel's denouement, "Meet Mrs. Bundren" (162, 182). Faulkner's technique of changing tenses highlights a sudden break in narrative continuity and forces the reader to realize that Cash speaks from a time well after Anse's remarriage. Events are thus regarded both as they happen and in hindsight within what is presumably a single, continuous utterance.

Vernon Tull's account of Addie's funeral is also exemplary of this discontinuity. The events of the funeral itself are recorded in the present tense, seemingly as they take place. However, this present tense section is placed between two passages in the past tense. The opening section perhaps brings the reader up to Tull's present time, the moment when Anse greets the funeral guests. If the reader is in fact brought up to the present time, this only reinforces the impression of the simultaneity of the funeral and its narration. At the end of a chapter, however, beginning in the middle of a paragraph, the point of view is suddenly some time afterward, and events that take place three days after the funeral are narrated as past occurrences. Then with a shift in typeface but no change of tense, Tull relates an event which occurs on the drive home from the funeral.

In addition to changing between past and present tenses, Faulkner also manipulates his method of presentation, allowing the reader on occasion to see characters not only as they see themselves, but as others see them as well. This technique of "multiple presentation," as Cleanth Brooks terms it, enables the reader to develop a sympathetic rapport with certain characters, while "constantly forcing [them] back into the total perspective of the world--the world of the family and the larger world of the community" (160). He offers as evidence for this technique the depiction of Dewey Dell, who constantly laments her predicament as one of being solitary and alienated. "It's because I am alone," she says. "If I could just feel [the child she's carrying], it would be different, because I would not be alone" (37). Her situation perforce precludes her from being able to grieve for her mother, she contends. "I wish I had time to let her die. I wish

I had time to wish I had. It is because in the wild and outraged earth too soon too soon too soon. It's not that I wouldn't and will not it's that it is too soon too soon too soon," she wails while aboard the wagon carrying her mother's coffin to her burial ground (78).

Upon arriving at their destination, however, Faulkner gives his reader another character's take on Dewey Dell. Says the slightly self-righteous pharmacist Moseley to Dewey Dell's roundabout inquiry into an abortion pill: "I haven't got anything in my store you want to buy, unless it's a nipple. And I'd advise you to buy that and go back home and tell your pa, if you have one, and let him make somebody buy you a wedding license" (137). The prescription Dewey Dell is given for her self-described "female troubles," Brooks argues, gives the reader an opportunity to see "something else," another perspective, and in doing so the pathos of the situation is intensified (161).

Finally, Faulkner even "manipulates" the visual surface of the novel's typographic design. Of special significance are the book's several textual ruptures and blanks. The reader witnesses one example of this rupture on page 54, on which he reads nothing but "Vardaman" and, below, the confounding statement "MY MOTHER is a fish." Additionally, within the printed text itself, distances between words begin to widen for no apparent reason. The reader can observe this phenomenon as early as the end of Darl's first section--"Chuck. Chuck. Chuck" (4)--or again in Vardaman's last:

I hear the cow a long time, clopping on the street. Then she comes into the square. She goes across the square, her head down clopping . She lows. There was nothing in the square before she lowed, but it wasn't

empty. Now it is empty after she lowed. She goes on, clopping . She  
lows" (174).

These gaps in the text, I would suggest, are not gratuitous; they have a meaningful function. Such blanks depend on the words surrounding them for whatever meaning they may have, but at the same time they call into question the significance of their verbal context by pushing into visibility the materiality of the letter itself. A similar defamiliarization is produced by the drawing of a coffin right in the middle of a sentence in one of Tull's sections (56). For reasons unexplained, the continuous flow of words on the page is broken, and the trace of the speaking voice which the script is assumed to render is interrupted.

Like *The Sound and the Fury*, *As I Lay Dying* also departs from the realistic paradigm inherited from the 19<sup>th</sup> century, and does so even more strikingly than the earlier book. It truly is, as Faulkner himself described it, a *tour de force*. However, to simply say that *As I Lay Dying* is something new or innovative does not do the text much service (Faulkner's 6). In fact, *As I Lay Dying* fits very nicely into the much broader and richer and older novelistic tradition, beginning with the serio-comic genres of Antiquity and the Middle Ages, whose roots Bakhtin found in exuberant folk rituals such as those of the carnival. In the diversity of its styles, voices, and moods, its emphasis on incongruity, its recourse to irony, humor, and parody as well as in its themes and motifs--the interplay of birth and death, madness and scandal, and the "world turned upside down"--*As I Lay Dying* clearly partakes of this tradition of irreverence, an irreverence

whose ultimate manifestation, I argue, is witnessed in the form of the Internet.

What is arguably most frustrating about *As I Lay Dying* is the fact that it tells of people's lives while saying nothing about them. Each section provides "information for information's sake," while not giving the reader anything of substance regarding the characters. One after another the characters appear out of no definable place or time and speak as if on an empty stage, telling what they have to tell, whereupon they vanish as suddenly and as inexplicably as they arrived. They all tell fragments of their own or others' stories, voice wonder at their life or outrage at their miseries; but somehow their speeches do not add up or make sense. *As I Lay Dying* surprises the reader by its apparently disjointed composition. Bleikasten observes that the brevity of the sections calls to mind the scenes of a play rather than the chapters of a work of fiction. "Hence an impression of discontinuity," he says, "which is increased and reinforced by the almost kaleidoscopic rotation of the viewpoints. In each section the perspective shifts, the lighting changes, so that each time the reader is caught off balance and forced to make constant readjustments if he wants to follow the narrative through all its twists and turns" (*Faulkner's* 3-4).

It does not necessarily follow that writers such as Joyce and Faulkner directly contributed to our contemporary understanding of hypertext. As I suggested earlier, the relationship is instead an example of isomorphism, in that the ideas being pursued in Faulkner's writing are similar to those being simultaneously pursued by pioneers in the technology world. I offer for an example a comment by a reporter for the University of

Virginia's student weekly, who opined in 1931 that:

Mr. Faulkner had a very interesting idea, centering about the thesis that Dostoevski could have written the *Brothers* in one third the space had he let the characters tell their own stories instead of filling page after page with exposition. In the future novel, or fiction--Mr. Faulkner contends--there will be no straight exposition, but instead, objective presentation, by means of soliloquies or speeches of the characters, those of each character printed in a different colored ink. Something of the play technique will thus eliminate much of the author from the story. And the consequent loss of personality? Is not all writing interesting and important only insofar as it expresses the personality of the author? All exclusive of the story, Mr. Faulkner says, is dead weight. (Gwynn 97)

This idea of struggling with useless, irrelevant information that Faulkner saw in the likes of Dostoevski is precisely what was at issue in the thought processes of Vannevar Bush as he developed the idea for the memex. The goal of this product was to liberate researchers from the confines of inadequate systems of classification and to permit them to follow more natural means of selecting data. "The essential feature of the memex," Bush claimed, "is the idea. . . whereby any item may be caused at will to select immediately and automatically another" (106). He then provides a situation in which readers might be able to successfully create "endless trails" of such links:

When the user is building a trail, he names it, inserts the name in his code

book, and taps it out on his keyboard. Before him are the two items to be joined, projected onto adjacent viewing positions. At the bottom of each there are a number of blank code spaces, and a pointer is set to indicate one of these on each item. The user taps a single key, and the items are permanently joined. In each code space appears the code word. Out of view, but also in the code space, is inserted a set of dots for photocell viewing; and on each item these dots by their positions designate the index number of the other item. Thereafter, at any time, when one of these items is in view, the other can be instantly recalled merely by tapping a button below the corresponding code space. (106)

This lengthy quotation clearly illustrates the connection between the disparate thought processes of Faulkner and Bush. Both autonomously contended that their fields sagged under a plethora of extraneous information. The most important information, they both argued, is that which the reader/user makes for himself. A true "hyper-text" allows the reader the opportunity to make those links and associations. "If this sorry, shabby world does not please you," Faulkner told students at the University of Virginia, "you create one of your own" (Gwynn 58). The World Wide Web of information in which we live today is one which Faulkner certainly ought to have celebrated.



### Borges' Labyrinth of Labyrinths

There are no moral or intellectual merits. Homer composed the *Odyssey*; if we postulate an infinite period of time, with infinite circumstances, the impossible thing is not to compose the *Odyssey*; at least once.

- Borges, "The Immortal"

Prior to 1950, the vast majority of Latin American novelists relied on traditional realism to depict life in their native lands and to convey messages of social protest. During the 1950s and 1960s, however, this regionalist fiction underwent a series of drastic changes that transformed it into a dynamic art form. The spiritual "father" of this "revolution" in contemporary Latin American letters is the Argentine Jorge Luis Borges, whose metaphysical themes and stylistic innovations inspired a younger generation of writers to explore the realities of their rapidly evolving societies. Thus, it is often said that Borges not only liberated Latin American literature from documentation, but also restored imagination as a major fictional ingredient (Stabb ix). While Borges eschews the stream of consciousness technique made famous by Joyce and Faulkner, I suggest that his themes (multiple universes, infinity, memory) pick up where the former two leave off. "The Garden of Forking Paths" and "Funes the Memorious," both from Borges' *Labyrinths* collection, will be the subjects in this chapter. I contend that viewing these two stories from the perspective of hypertext theory will create new appreciation and understanding for both Borges' fiction and the hypertextual world in which we live.

Critics have stated that, like Kafka, Borges writes realistically about fantasy, and indeed his concise, classical language and his allusions to obscure, seemingly factual material tend to make his unsuspecting reader accept what would ordinarily be rejected (Bloom 1). Reading Borges is akin to web-surfing: his message is compact and delivered quickly (in the form of the short story), and the “facts” of the narrative are always subject to question. Following his assertion that unreality is the condition of art, Borges uses a wide variety of stylistic devices to blur reality and create a shadowy, hallucinatory world that somehow preserves the underlying essence of the human condition. His writings are sprinkled with understatements, affirmations by negation, parenthetical corrections or commentaries, and doubts or denials of information previously stated as truth. At the same time, he bolsters the credibility of his tales by introducing the scholarly footnote, often documented with page numbers and precise dates, and by alluding to maps, atlases, dictionaries, encyclopedias, and real people. The uncertainty created by this juxtaposition of fiction and authorized “fact” reflects his belief that intellect and truth are no less illusory than imagination and art.

The study of Borges' works reveals him to be a writer who views fiction not as an artistic representation of the real world, but rather as a poetic recreation of the cultural codes he calls “labyrinths” that man has fabricated throughout history. Borges readily admits that his fictional universe stems from his varied and often esoteric readings in literature, philosophy, and theology, fields of human endeavor that, in his opinion, have analyzed and explained the world in fascinating but purely fictitious terms. As a result of

these basic ingredients, his tales exude an aura of unreality that for him constitutes the very nature of art. Borges considers man's quest for truth an utterly vain endeavor; philosophy and theology represent "provisional" systems of thought destined to be discredited and replaced by others; history evolves as a product of the imagination tempered by time; and psychology is downgraded as fakery because individual behavior depends on phenomena far too numerous and complex to be systematized and understood (de Man 23). Thus Borges limits himself to the portrayal of faceless characters in archetypal situations that serve to conceptualize as well as to formalize his fictional world.

Like many 20<sup>th</sup>-century authors, Borges depicts the absurdity of mortal man's search for meaning and transcendence in an infinite universe beyond his intellectual comprehension. The absurd is illustrated not only by the vain quest for truth but also by the artist's persistent, though futile efforts to achieve esthetic perfection. He frequently dons the mask of the bungling narrator, contradicting himself at every turn or frankly admitting that he does not know all the facts surrounding the events he is relating. The result is the collapse of certainties and an ever-increasing awareness that beneath outward appearances there exists an uncharted realm of endless contradictions, the probing of which is a major facet of Borges' fiction.

One of Borges' most haunting images is the labyrinth, a symbol of chaos and confusion that usually takes the form of a mental structure designed to explain the incomprehensible. Emir Rodriguez-Monegal states that the labyrinth

fixes symbolically a movement from the exterior to the interior, from form to contemplation, from multiplicity to unity, from space to absence of space, from time to absence of time. . . . The labyrinth becomes then, from the traditional point of view, the image of a chaos ordered by human intelligence, of an apparent and deliberate disorder which contains its own key. (139)

Borges frequently refigures linear time as a labyrinth, a device that serves to capture human experience in man-made patterns reminiscent of universal myths. Indeed, Borges' typical story represents a symbolic, self-contained microcosm, in which chaos is pitted against order, ignorance against knowledge, or illusion against reality. This endless confrontation of opposites produces the overall impressions of circularity, timelessness, and compositional unity so characteristic of Borges's entire body of work.

In none of Borges' stories does the labyrinth figure as prominently as in "The Garden of Forking Paths." The story commences with an air of suspicion and doubt. The reader is almost instantly asked to question what is real and what is unreal, true and untrue. Such a quandary is exacerbated by Borges' "editor's note" at the bottom of the page. The reader wonders: "who is the editor making that note—Borges or the 'real editor?' Am I reading an essay, a biography, a piece of fiction?" The story begins with a paraphrase of a passage from B. Liddell Hart's World War I history, describing a delay in an allied bombing campaign that was attributed to the weather. This report of the postponed attack, however, is mostly a "Borgesian" invention. Hart's actual narrative

does in fact allude to a battle in 1916 near Montauban, in which the same number of British divisions were involved, but there is no mention of a postponement; and the heavy precipitation took place in November (in the form of snow), not July, as Borges indicates (238, 265). Ultimately, as Gene Bell-Villada notes, the reference to Liddell Hart's history merely provides the narration that follows with a background, and also helps create an aura of significance. (93). Indeed what follows in the ensuing pages, as the report acknowledges, "throws an unsuspected light over the whole affair" (Borges 19).

Yu Tsun, who "dictated, reread, and signed" the subsequent narrative, is a Chinese spy for Germany, living in England during the War. Tsun tells of his attempts to call a fellow spy at his apartment. When his nemesis Richard Madden, a counterespionage agent from England, answers the phone, Tsun realizes that his end is drawing near. He has important information to convey to the chief, however, and he quickly hatches a plan to do so. The nature of that intelligence is kept a mystery. Through the device Ian Watt calls "delayed decoding," Yu leaves his reader with no idea as to what that information is, nor how his actions will serve his end, until the very conclusion of the story. This device allows the reader to "witness every step by which the gap between individual perception and its cause is belatedly closed within the consciousness of the protagonist. . . . It combines the forward temporal progression of the mind, as it receives messages from the outside world, with the much slower reflexive process of making out their meaning" (175). This delayed decoding is a move that anticipates the idea of a hypertext. The reader sees hyperlinks on a page that will take

him to another location, perhaps to an explanation of the page he is currently occupying, or to another topic altogether. In the narrative form, however, one is perforce required to travel in linear fashion to the conclusion. Yu grabs a revolver, chooses a name in the phonebook, "the name of the only person capable of transmitting the message; he lived in a suburb of Fenton, less than a half hour's train ride away" (21). He immediately rushes out to purchase a ticket and board a train to that person's location, momentarily escaping the hot pursuit of his rival.

As it turns out, the person he intends to visit is (unbeknownst to him) a renowned Sinologist. Moreover, this Sinologist, Dr. Steven Albert, has specialized in the translation and explication of the writings of Yu's great-grandfather, Ts'ui Pen. Ts'ui himself was an eccentric figure, an influential person in Chinese high society, who abandoned livelihood and family to write a book and to create a labyrinth. Upon his death, however, his descendents were dismayed to learn that all he had created was a series of confounding manuscripts collectively entitled *The Garden of Forking Paths*.

Albert, however, unlocks the secret of Ts'ui Pen. Ts'ui's "will" tips him off: "I leave to the various futures (not to all) my garden of forking paths," the chaotic novel that Ts'ui and all his other relatives had dismissed as mere ramblings (25). Despite its disordered appearance, Albert explains, the book is not merely "an indeterminate heap of contradictory drafts" (as Yu contends). Rather, it is a cosmic parable about Ts'ui Pen's conception of the simultaneity of time. Ts'ui has taken the metaphor of life as a game of chess, where each move made has consequences: consequences for the one making the

move and consequences for the opponent. One move sets in motion other moves, which will in turn initiate other moves, until conclusion. However, Ts'ui articulates some fundamental differences between life (or literature) and chess. First, the moves a reader makes have consequences to perpetuity; that is to say, there is no "conclusion."

Secondly, unlike the quasi-linear progression of chess, in which "reality," or the present, is dictated by the opponent's last move, Ts'ui sees all possible moves existing at the same time. The manuscript in which Ts'ui articulates these concepts *is* his labyrinth: they are one and the same. He conflates the two tasks ("I am withdrawing to write a book" and "I am withdrawing to construct a labyrinth"), and uses the resultant product as a medium to set forth his explanation of multiple universes. Says Albert:

A broad rereading of the work confirmed the theory. In all fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Ts'ui Pen, he chooses—simultaneously—all of them. He creates, in this way, diverse futures, diverse times which themselves also proliferate and fork. . . . In the work of Ts'ui Pen, all possible outcomes occur; each one is the point of departure for other forkings. (26)

The forkings to which Albert refers, I would argue, suggest a metaphor for the Internet. Yu reacts to this exposition of Albert's with a feeling "within [his] dark body of an invisible, intangible swarming" (27). To sustain the metaphor, then, the swarming he senses might correspond to the buzzing megahertz of the network, indeed the labyrinth,

that exists behind the page of the moment. HTML becomes a multi-sequential system that is both an author's tool and a reader's medium, a system which allows authors or groups of authors to link information together, to create Ts'ui's paths through a body of related material, to annotate existing texts, and to create notes that point readers to other data or to the body of the referenced text (Landow 58). The reader, meanwhile, must decide whether to return to the central argument, pursue some of the associations suggested by links, or, using other capacities of the system, search for connections not suggested. Both hypertext, which appears in multiple links to individual blocks of text, and Ts'ui's labyrinthine manuscript, call for an active, engaged reader (59).

Multiplicity then brings to life the idea of reading and interpreting as a game. The "Internet web-surfer" opens up one page, the "initial text" identified earlier. The hyperlinks contained on the page provide the reader a series of choices. One option allowed him is to pursue his initial train of thought down the page to its conclusion. Alternatively something may grab his attention, which in turn prompts him to pursue something in which he had hitherto been interested but which he had perhaps forgotten. In another browsing he may see a link to something he had never contemplated before, and now, in light of what he had just read on the initial text, such a link intrigues him. A more experienced hypertextual reader, meanwhile, may observe or notice something he has explored before, but he now registers optically that the link has been updated and modified. Consequently he pursues it to explore the dimensions in which it is truly "new." Indeed Yu had actually been engaged in a similar game on his way to Albert's



residence, even prior to the explanation he would receive later from the illustrious Sinologist:

Beneath English trees I meditated on that lost maze [of Ts'ui's]: I imagined it erased by rice fields or beneath the water; I imagined it infinite, no longer composed of octagonal kiosks and returning paths, but of rivers and provinces and kingdoms.... I thought of a labyrinth of labyrinths, of one sinuous spreading labyrinth that would encompass the past and the future and in some way involve the stars (17).

The paths, Borges' "bifurcations," are limitless. The activities they facilitate and encourage are rewarding. Borges never answers the question "what is real?" Rather, he raises more possibilities and more questions. Susan Stewart examines this idea of an interplay between a seemingly inexhaustible supply of possibilities in time and fixed boundaries of space. In *Nonsense: Aspects of Intertextuality in Folklore and Literature*, Stewart contends that play takes up time and space; the playing field's boundaries are indiscernible, and it affords the player a "consciousness of timelessness, with an experience outside the everyday lifeworld that partakes of infinity" (121). In Borges' multiple universes, equal latitude is granted to science, science fiction, history, and fantasy, all of which are woven into "reality."

By now it should be obvious that hypertext does not permit a tyrannical, univocal authorial voice. Instead, the voice is always that distilled from the combined experience of the momentary focus, the blocks of text one presently reads, and the continually

forming narrative of one's reading path. The related effect of electronic linking is that it disperses "the" text into other texts. As an individual text-block loses its physical and intellectual separation from others when linked electronically to them, it finds itself dispersed into them. The necessary contextuality and intertextuality produced by individual reading units within a network of easily navigable pathways weaves texts, including and perhaps especially those texts by different authors, tightly together. One effect of this process is to weaken and perhaps destroy any sense of textual uniqueness (Landow 80).

The denial of the unique is a concept Yu finds disquieting, a concept which had in fact been disturbing him prior to his epiphany with Albert. He hates Madden, but not merely because Madden is his enemy. His contempt also stems from understanding his similarity or kinship with him. Madden, "an Irishman at the service of England, a man accused of laxity and perhaps of treason" (19) is as much a foreigner as Yu, with similar motivations. Madden's redemption lies in the defeat of Yu Tsun; his impetus for action is a self-serving one. Neither is Yu's plan carried out for a greater good. "I didn't do it for Germany, no," he confesses. "I did it because I sensed that the Chief somehow feared people of my race—for the innumerable ancestors who merge within me. I wanted to prove to him that a yellow man could save his armies" (21). Despite these premonitions of merging, simultaneous existences, however, he is nonetheless flabbergasted by Albert's revelations. The mercurial ancestor Ts'ui Pen, whom he and his family had dismissed as an eccentric recluse, is himself given a new life. He rises to the top of those

innumerable ancestors, and gives them a voice. Albert brings it all into focus, at least momentarily, for the Chinese spy:

The explanation is obvious: *The Garden of Forking Paths* is an incomplete, but not false, image of the universe as Ts'ui Pen conceived it. . . . He believed in an infinite series of times, in a growing, dizzying net of divergent, convergent and parallel times. This network of times which approached one another, forked, broke off, or were unaware of one another for centuries, embraces *all* possibilities of time. (28)

Once again the notion of a hypertextual world surfaces, along with the proliferation of "what if's." The multiple universes that Borges realizes through his character of Steven Albert are manifested, presently, in the Internet, the network of both similar and dissimilar worlds of thought and ideas. Even the adjectives which Albert uses to characterize Ts'ui's labyrinthine manuscript--"infinite," "growing," and "dizzying"--are the same as those used to describe the Web. As Landow says, "Network in this fullest sense refers to the entirety of all those terms for which there is no term and for which other terms stand until something better comes along, or until one of them gathers fuller meanings and fuller acceptance to itself. . . . To gain access to information, in other words, will require access to some portion of the network" (24). For both Albert and Borges, everything is possible. The "real world" in which we exist and that we presently experience is only one of an infinite number of existences. Every decision we have made to this date, no matter how trivial or even inadvertent, has had consequences.

Borges takes this mundane observation, however, and explodes it. Not only do our innumerable decisions have consequences that have created who we are at this moment; those decisions, those forks, have lives of their own in some other unrealized plane. Infinity becomes synonymous with timelessness. It appears as the measurement that cannot be measured, a boundary that is never arrived at, that is constantly deferred and yet always potential. It becomes like any other possibility that is deferred in everyday life and made obvious in absurdity (Stewart 120). Borges, like Joyce and Faulkner before him, rejects the realism of late 19<sup>th</sup>-century literature. Rather than having his characters restricted to recognizable people and places, with meticulous attention to character traits and physical detail, Borges aims instead to tap the artistic potential of unreality, to put fantasy to work in literature, to allot to the imagination a role beyond its traditional job of reorganizing and refining everyday life. Indeed, his goal is to restore to human thought its capacity for dreaming up infinite notions and for fashioning something new.

What we have, then, through Borges' delayed decoding, is a series of possibilities that do not exist. The reader is asking himself, "what if?" and projecting possible answers or speculations to his questions into the text. To that end, hypertext becomes an idealized medium. It offers the writer a structure for what does not yet exist. The story, then, is no longer circumscribed within the confines of the pages; its boundaries are altered, and in some instances completely removed. Says Stewart:

The manipulation of boundaries, performed in time as well as in space, may also involve a play with the possibility of infinity. Just as play with

the boundaries of discourse events involves a transformation of members' expectations regarding the horizon of the situation, so play with infinity involves a transformation of another aspect of members' expectations—their sense of events as characterized by distinguishable beginnings and endings. (116)

In other words, Borges' delayed decoding, itself a primitive form of hyperlinking, allows the reader to consider alternative prospects to those necessarily intended by the author. Says Stewart Moulthrop in his essay "Rhizome and Resistance: Hypertext and the Dreams of a New Culture," "This [medium] is a space for improvisation and discovery where users may pursue multiple lines of association or causation rather than having to fit assertions into an exclusive, singular logic" (239). Hypertext linking, reader control, and variation not only militate against the modes of argumentation to which we have become accustomed but have other, far more general effects, one of which is to add what may be seen as a kind of randomness to the reader's text. Another is that, like Ts'ui Pen and his labyrinth, the writer loses certain basic controls over his text, particularly over its edges and borders. Yet a third is that the text appears to fragment into constituent elements. These reading units then take on a life of their own as they become more self-contained, because they become less dependent on what comes before or after in a linear succession (Landow 52).

While the individual hypertext text-block has looser, or less determining, ties to other text-blocks from the same work, it also associates itself with text created by other

authors. In fact, it associates with whatever text links to it, thereby dissolving notions of the intellectual separation of one text from others in the way that some chemicals destroy the cell membrane of an organism. Electronic linking, which emphasizes making connections, immediately expands a text by providing large numbers of points to which other texts can attach themselves. The permanence and physical isolation of book technology, which permits standardization and relatively easy reproduction, necessarily closes off such possibilities. Hypertext opens them up.

To return to Borges' story, one sees that the idea of opening horizons is not lost on Yu Tsun. His predicament, however, rests in the message he must convey to the chief. Ironically, Albert, the man who helps Yu discover this new epistemology, is unaware of what exactly it portends. Yu muses after his epiphenomenal experience:

It seemed to me that the humid garden that surrounded the house was infinitely saturated with invisible persons. Those persons were Albert and I, secret, busy, and multiform in other dimensions of time. I raised my eyes and the tenuous nightmare dissolved. In the yellow and black garden there was only one man; but this man was as strong as a statue. . . this man was approaching along the path and he was Captain Richard Madden. (28)

Stephen Albert's pulse and prophecies intermingle with the imminent action Yu has planned. The message Yu must get through, amid the cacophony of warring industrial machines, is the "secret name of the city" that the Germans must bomb—Albert, France. His resources are almost non-existent, and he is, by his own admission, a

coward. He has, however, a revolver with one bullet in it, and he believes that the effect of a gun shot, in lieu of the sound of the human voice, may travel from Staffordshire, where he is, to Germany. The solution to his problem is to shoot the famous Sinologist. Yu Tsun, whose great-grandfather Ts'ui Pen was murdered by "the hand of a stranger," himself becomes the stranger who murders the man who has given his ancestor new life. Ts'ui achieves immortality with his *Garden of Forking Paths*; Yu likewise achieves immortality with the narrative he has "dictated, read, and re-read." Borges' story begins retrospectively; Ts'ui's work collapses and subverts traditional notions of "beginnings" and "endings." "In the third chapter the hero dies, in the fourth he is alive" laments Yu. Says Stewart:

... Fiction comes to write the world. There is no place to point to in answer to the question "who is writing/talking?" other than "the writing/talking is writing/talking." In this sense, a method of infinite causality is being used whenever nonsense effaces the boundary between author and reader, reader and character, or author and character. (Stewart 142)

In "Borges and I" the author comments on the idea of the self as an amalgam of perceptions, while expanding this idea in his fictional proliferation of identities and alternate realities. He comments on the dual existences of "Borges," the one who is read, and the one who does the writing. "Little by little, I am giving over everything to him. . . . I do not know which one of us has written this page" (246). Yu's chief,

however, has no such problem with understanding intentions. A tireless reader of the newspapers, he learns of the murder and takes the hint: the artillery park at Albert on the River Ancre is the position that is to be bombed. Yu Tsun's story is ultimately directed to the transmission of a name. "Albert," then, means something more at the end of the story than what it meant at the beginning: it has been enhanced. The fiction has done its work (Sturrock 192).

Another of Borges' short stories from *Labyrinths* which benefits from a 21<sup>st</sup> century, hypertextual examination is "Funes the Memorious." The story is set in the 19<sup>th</sup> century in a remote region of Uruguay. Ireneo Funes is a precocious, if not unassuming, teenager, and also a local celebrity of sorts. His talent, as the narrator soon learns, is that he can tell the time of day without the use of a watch. "What time is it, Ireneo?" inquires the cousin of the first person narrator, in an effort to provide the title character an opportunity to showcase his ability. "It's four minutes to eight, young Bernardo Juan Francicso," Funes replies matter of factly, "without consulting the sky, without stopping" (60).

This brief encounter is the extent of the narrator's initial involvement with Funes. He departs for his home without making further contact with the chronologic prodigy, and spends the next two summer vacations away from the remote Uruguayan hamlet of Fray Buentos. In the third year after the initial contact the narrator returns, only to discover that in the interim Funes had been thrown from a horse, and has been left a



paraplegic. As a consequence of this accident, however, Funes receives the gift, such as it is, of total recall.

Just before the narrator returns home again, he visits Funes in his dark bedroom and finds the young paraplegic contemplating (in Latin, no less) Pliny's *Natural History*, devoting special attention to the passages which enumerate dramatic examples of memory: "Cyrus, king of the Persians, who could call every soldier in his armies by name; Mithridates Eupator, who administered the law in twenty-two languages; Simonides, inventor of the science of mnemonics; Metrodorus, who practiced the art of faithfully repeating what he had heard only once." Funes, however, is hardly impressed by these purported demonstrations of mental prowess. "In obvious good faith," the narrator reports, "Ireneo was amazed that such cases be considered amazing" (63). His absolute memory necessarily precludes him from being impressed by these otherwise notable mental achievements.

In addition to having the ability of total recall, Funes' perception of the present is also absolute. The narrator distinguishes between most people's casual observations versus those of Funes:

[He perceives] all the leaves and tendrils and fruit that make up a grape vine. He knew by heart the forms of the southern clouds at dawn on the 30<sup>th</sup> of April, 1882, and could compare them in his memory with the mottled streaks on a book in Spanish binding he had only seen once and

with the outlines of the foam raised by an oar in the Rio Negro the night before the Quebracho uprising. (63)

Finally, Funes' consciousness even goes so far as to take into account alternating physical frames of reference. For example, a dog seen sideways at 3:14 is to Funes a totally different phenomenon from the same dog seen front-wise at 3:15. As a result, Funes is forced to conclude that all languages are simply too general. In an effort, then, to "properly" label every single object and moment and thus grant some order to all that he sees, Funes devises purely arbitrary linguistic and numerical systems of classification. Unfortunately for Funes, that which he has gained in memory, he loses in the realm of general concepts; he is all discrete memories and perception, with no capacity to organize these into categories. Bearing in mind the appreciation Borges has for Joyce and Faulkner, one cannot help but think of Bloom and Benjy as he reads the story of Funes. His tale is simply the latest iteration of the effect of information overload on the human mind. His mind is, as he puts it, a vast "garbage heap" of too little differentiated, ever-new facts from past and present (62).

All information the narrator provides the reader about Funes underscores the boy's troublesome life. The physical paralysis Funes suffers symbolizes his fundamental inability to create substantive meaning from the perceptions which constantly bombard him. Funes, Bell-Villada notes, "chronically bed-ridden, immobile in his contemplation, . . . is in more ways than one the helpless prisoner of his gift. Hence, though the world he sees may be varied and rich, the life he leads is monotonous and poor" (98). One cannot

help but see the connection between Funes and the information society in which we live today. Funes has become, to some extent, everyman: he is incessantly bombarded by information, a vast amount of which will only take up space in the mind only to be proven ultimately useless. His thoughts and recollections lead him only to mental cul-de-sacs. The disparity that exists between Funes' world and his life in Borges' fiction is reality for many who have become seduced by the facility with which the Web can provide them information.

Additionally, Funes' dark bedroom, the only place where he is at least quasi-effective in keeping the bombardment of images at bay, is also symbolic of the contradiction between Funes' vast bank of factual knowledge and unending frustration such a wealth of knowledge causes. As such, it is important to note that Funes is associated throughout the piece with darkness. For example, the narrator's first momentary encounter with Funes occurs "after a sultry day," when "an enormous slate-colored storm had hidden the sky. . . . We entered an alleyway that sank down between two very high brick sidewalks. It had suddenly got dark. . . ." (60). The later interview with Funes the Memorious takes place at night; only toward the end does the sun peep out, revealing Funes' face for the very first time in the story. Funes' name itself, a word strongly suggestive of certain Spanish words variously meaning "funereal," "ill-fated," and "dark," reiterates the connection between Funes and darkness (McMurray 12). Finally, Funes' death before reaching the adult age of twenty-one emphasizes his inability to develop and grow beyond his current stagnant mental and physical state. It highlights

the tentative constitution of his gift, while at the same time it suggests the necessarily fleeting nature of such a phenomenon (Bell-Villada 99).

Borges once said that "Funes the Memorious" is an autobiographical "metaphor of insomnia." He wrote it during a troubled period when he could not stop thinking:

[I was] continuously imagining the hotel, thinking of my body and of things beyond my body and the hotel. I would think of the adjoining streets, of the street leading to the train station, of the neighboring houses, of the tobacco shop. . . . Later I reached this conclusion: it is fortunate my memory is fallible, fortunate my memory is not infinite. How terrifying it would be if my memory were infinite! It would undoubtedly be monstrous! In that case I would remember every detail of every day of my life, which of course amounts to thousands--as Joyce showed in *Ulysses*. . . . Thus I came upon the idea of that unfortunate country boy, and this was the birth of the story of "Funes the Memorious." (Alifano 28)

As Borges sees it, then, the story is a fable about the need (and difficulty) of being able to forget. Far more important than Borges's own interpretation, however, are the story's obvious hints, both comical and suggestive, concerning the intricate relationships between objective reality, sense perception, and organized language and thought. "Funes the Memorious" is an "informal inquiry into the nature of human understanding, an

amusing philosophical diversion that flirts with the question of what constitutes knowledge" (Bell-Villada 100).

As has been shown in this chapter, the Borgesian ideas and opportunities presented in these short stories, ideas more accessible in a hypertextual, or virtual, world, are limitless. In conclusion, I would suggest these two stories represent the poles of the hypertextual experience. "The Garden of Forking Paths" celebrates the possibilities of the "growing, dizzying net," as Albert puts it. Possibilities are innumerable, a message that lives on despite its utterer being shot in cold blood. "Funes," on the other hand, reads as a warning of sorts; it is a cautionary tale for those who become overly enamored with the prospects of getting lost in the labyrinth. Funes prefigures McLuhan's "21<sup>st</sup>-century man," who

sits in the informational control room. . . receiving data at enormous speeds--imagistic, sound, or tactile--from all areas of the world. . . . His body will remain in one place but his mind will float out into the electronic void, being everywhere at once in the data bank. . . . He loses his sense of private identity because electronic perceptions are not related to place. Caught up in the hybrid energy released by video technologies, he will be presented with a chimerical "reality" that involves all his senses at a distended pitch, a condition as addictive as any known drug. The mind, as figure, sinks back into ground and drifts somewhere between dream and fantasy. Dreams have some connection to the real world

because they have a frame of actual time and place (usually in real time);  
fantasy has no such commitment. (97)

This message is underscored by Funes' remarks about the unimportance of having been paralyzed, an event which makes possible the virtual life he now leads. Clearly Funes does not choose the fate that awaits him after his accident, unlike the modern web junkie, who hearkens to the siren song of the Internet only to find himself lost in a time sink. It is notable, of course, that Funes lacks agency. Should his "gift" have been something he sought and cultivated, the story would lose its objectivity at the expense of sermonizing. Consequently, it is the fate of Funes that is of importance. It is, I suggest, the Funes of this world whom George Cotkin has in mind when he wonders if "the experience of Hypertext. . . might prove. . . to be a bit tiring in the end. . . . Most academics and normal people, I suspect, when presented with the imperative not only to be creative but also to steer a blind path through a mass of data, will actually long for the old days of the unified, authoritative voice" (115). Such an assertion may be a bit of an overstatement, and in light of the technological advances evidenced even in the last ten years the notion of returning to a textual Eden is illusory. Moreover, with the advent of the hypertext, even to attempt to rebut Cotkin's contention would be futile. While the opportunities hypertext affords us as readers are tremendous, only time will tell if its effects are ultimately beneficial.

## Conclusion

Take the case of the locomotive, the dynamo, aviation, cinema, radio, whatever. Is it not evident that these numerous devices are born and developed, successively and together, from roots in a prior world-wide mechanical state? For a long time, there have no longer been either isolated inventors or isolated machines. But, more and more, every machine comes into being as a function of all other machines of the earth, and, more and more again, all the machines of the earth taken together tend to form a single structured, large Machine. . . .

- Teilhard de Chardin, *The Phenomenon of Man*

Non-artists always look at the present through the spectacles of the preceding age.

- Marshall McLuhan, *Understanding Media*

There is a saying among technical stock and commodity traders, who determine when to buy or sell certain issues by reading charts, that goes something like this: "Too fine an eye for a pattern will find it anywhere." This warning is equally applicable to literature. One should proceed with caution when applying contemporary understandings and vocabulary to texts that long preceded them. With regard to the texts of Joyce, Faulkner, and Borges, however, an examination which brings to bear hypertextual critical apparatus is warranted. Throughout this thesis I have highlighted aspects of my subject

texts that I contend anticipate our contemporary notions of hypertext. The patterns that the reader observes within these texts—multiplicity, fragmentation, the indeterminacy of memory—do not require a fine eye: they are there, waiting to be observed through the lens of a technology-based criticism. It is my hope that through this criticism I have shed light on the significance of these writers' contributions to both literature and technology. By doing so, I have shown how each of these authors, in McLuhan's terms, "grasp[ed] the implications of his actions and of new knowledge in his own time" (*Media* 65). This knowledge, I suggest, is manifested in the technology that makes possible hypertext.

Each of my subject texts provides a challenge to "reality." Likewise, the axiom of the Internet is "assume it's false until proven otherwise." The works of Joyce, Faulkner, and Borges exist as a challenge to the real by offering alternatives to what is commonly accepted as authoritative, official, or genuine. The impulse behind the creation of *Ulysses*, *The Sound and the Fury*, *As I Lay Dying*, "Garden of Forking Paths," "Funes," and a hypertext is not to explain, harmonize, or put into order. Instead, they each aim to create a sense of competing accounts of "reality." Each text subverts "the real" and raises questions about the way we understand it.

In *The Achievement of William Faulkner*, Michael Millgate noted that Faulkner displays a "persistent effort to hold in suspension a single moment of experience, action, or decision and to explore the full complexity of that moment by considering, in particular, its total context of past, present and future and its emergence as the often paradoxical product of many contrasted forces and pressures" (214). To some extent, this



statement is apropos of all three writers examined in this thesis. Each artist examines and turns over and over the single moment, the single event, the single act of comprehension in an effort to reveal the full implications and workings of the mind's creation. Through the device of the frozen moment, they each compel themselves to work at an understanding of a "fact," which he would call a "truth," while it is being explored from every possible temporal, spatial, and epistemological angle by the various characters and, vicariously, by the reader. In this sense, the text not only "challenges reality's right to be as it is," but also tests the individual's right to understand reality in *any* fixed way. From both the subject texts here and from hypertext emerges an endorsement of the continually created meaning, the eternally overturned fact.

Finally, as I stated toward the beginning of this thesis, the process of examining these texts as prefigurings of hypertext enables me to view one in light of the other. As Eliot noted, however,

The difference between the present and the past is that the conscious present is an awareness of the past in a way and to an extent which the past's awareness of itself cannot show.

Someone said, "The dead writers are remote from us because we know so much more than they did." Precisely, and they are that which we know. (58)

Analogously, we know more, in a general, historical sense, than the writers studied here. However, they are that which we know, and they have informed and perhaps made

possible the nonlinear paradigm of the hypertext and the World Wide Web. Among other things, the fact that we can fully articulate this paradigm distinguishes us from them. Without them, however, we may not have had this paradigm to articulate.

## Notes

<sup>1</sup> The reader may note that by contending that thoughts condition language, Holquist is inverting the Whorf-Sapir hypothesis of the 1920's, which asserted that language conditions thoughts/beliefs. I would suggest, however, that Holquist is merely noting that languages encode assumptions about space/time, and that language can be modified as those assumptions change.

<sup>2</sup> "Chaos," in the sense intended here, is defined as the "sensitive dependence on initial conditions" (Peter Smith 3). This sensitive dependence is also known as the "butterfly effect," a term whose roots James Gleick traces to a paper delivered by meteorologist Edward Lorenz at the 1979 annual meeting of the American Association for the Advancement of Science. The paper was entitled "Predictability: Does the flap of a Butterfly's Wings in Brazil Set Off a Tornado in Texas" (Gleick 322).

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